

**NEWFIELD**



February 17, 2006

State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Whitney  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: 1-19-9-16, 2-19-9-16, 3-19-9-16, 4-19-9-16,  
1-20-9-16, 3-20-9-16, 9-20-9-16, and 4-21-9-16.

Dear Diana:

Enclosed find APD's on the above referenced wells. The proposed Federal 1-19-9-16 is an Exception Location. Our Land Department will send you the required Exception Location Letter. If you have any questions, feel free to give either Shon Mckinnon or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

**RECEIVED**

**FEB 21 2006**

**DIV. OF OIL, GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.  
UTU-52018

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No.  
Federal 1-20-9-16

9. API Well No.  
43-013-33066

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
NE/NE Sec. 20, T9S R16E

12. County or Parish  
Duchesne

13. State  
UT

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
Newfield Production Company

3a. Address  
Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)  
(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface NE/NE 617' FNL 652' FEL 573779X 40.021886  
At proposed prod. zone 4430334Y -110.135419

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 15.2 miles southwest of Myton, Utah

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) Approx. 652' f/lse, NA' f/unit

16. No. of Acres in lease  
640.00

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. Approx. 1369'

19. Proposed Depth  
6040'

20. BLM/BIA Bond No. on file  
UTB000192

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
6038' GL

22. Approximate date work will start\*  
2nd Quarter 2006

23. Estimated duration  
Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
*Mandie Crozier*  
Title  
Regulatory Specialist

Name (Printed/Typed)  
Mandie Crozier

Date  
2/17/06

Approved by (Signature)  
*Bradley G. Hill*  
Title

Name (Printed/Typed)  
BRADLEY G. HILL  
ENVIRONMENTAL MANAGER  
Office

Date  
02-23-06

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

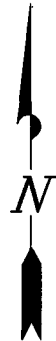
Federal Approval of this  
Action is Necessary

RECEIVED  
FEB 21 2006  
DIV. OF OIL, GAS & MINING

**T9S, R16E, S.L.B.&M.**

**NEWFIELD PRODUCTION COMPANY**

WELL LOCATION, 9 MILE 1-20-9-16,  
LOCATED AS SHOWN IN THE NE 1/4 NE  
1/4 OF SECTION 20, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.



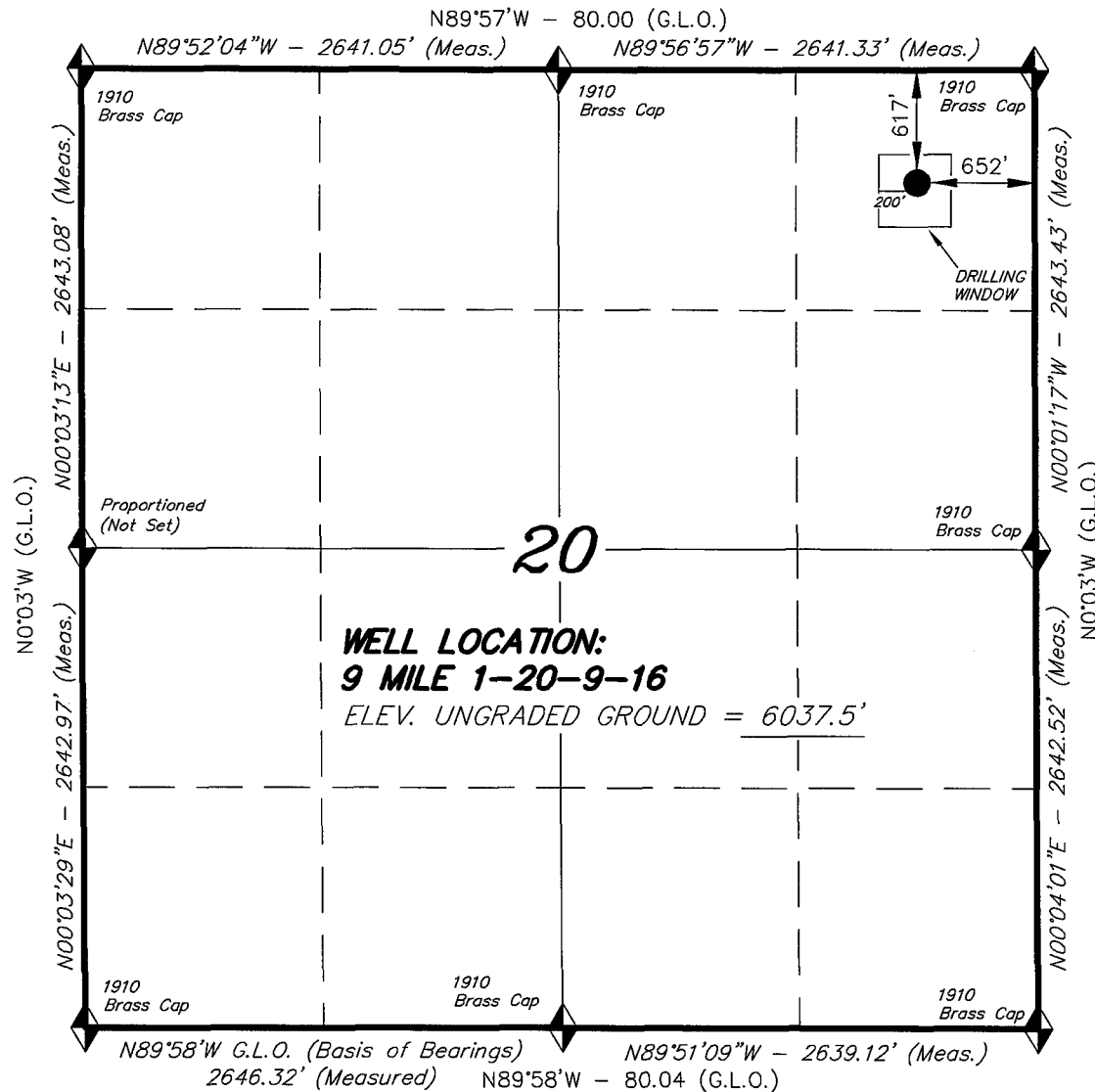
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377

*Stacy W. Stewart*  
STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 12-31-05	SURVEYED BY: C.M.
DATE DRAWN: 01-04-06	DRAWN BY: L.C.S.
REVISED:	SCALE: 1" = 1000'



◆ = SECTION CORNERS LOCATED  
BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SW)

**9 MILE 1-20-9-16  
(Surface Location) NAD 83**  
LATITUDE = 40° 01' 18.99"  
LONGITUDE = 110° 08' 09.95"

NEWFIELD PRODUCTION COMPANY  
FEDERAL #1-20-9-16  
NE/NE SECTION 20, T9S, R16E  
DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0' - 2600'
Green River	2600'
Wasatch	6040'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 2600' - 6040' - Oil

4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "C".

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

NEWFIELD PRODUCTION COMPANY  
FEDERAL #1-20-9-16  
NE/NE SECTION 20, T9S, R16E  
DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Federal #1-20-9-16 located in the NE 1/4 NE 1/4 Section 20, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southwesterly - 10.9 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly - 2.0 miles  $\pm$  to it's junction with an exiting road to the northeast; proceed northeasterly - 0.4 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed along the proposed access road - 1,570'  $\pm$  to the proposed well location.

2. PLANNED ACCESS ROAD

See Topographic Map "B" for the location of the proposed access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

All permanent surface equipment will be painted Carlsbad Canyon.  
Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #05-225, 7/13/05. Paleontological Resource Survey prepared by, Wade E. Miller, 11/10/05. See attached report cover pages, Exhibit "D".

For the Federal #1-20-9-16 Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed access road. **Refer to Topographic Map "B"**. The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed gas lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 6" gas gathering line, and a buried 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed water lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

**Golden Eagle:** Lease Notice Only.

### Reserve Pit Liner

A 12 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

### Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Crested Wheatgrass	<i>Agropyron Cristatum</i>	4 lbs/acre
Needle and Threadgrass	<i>Stipa Comata</i>	4 lbs/acre
Indian Ricegrass	<i>Oryzopsis Hymenoides</i>	4 lbs/acre

### Details of the On-Site Inspection

The proposed Federal #1-20-9-16 was on-sited on 11/3/05. The following were present; Shon Mckinnon (Newfeild Production), Melissa Hawk (Bureau of Land Management), and Amy Torres (Bureau of Landmanagement). Weather conditions were clear and ground cover was 100% open.

### 13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

#### Representative

Name: Shon Mckinnon  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

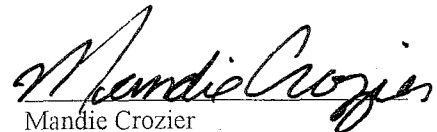
#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #1-20-9-16 NE/NE Section 20, Township 9S, Range 16E: Lease UTU-52018 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

2/17/06

Date

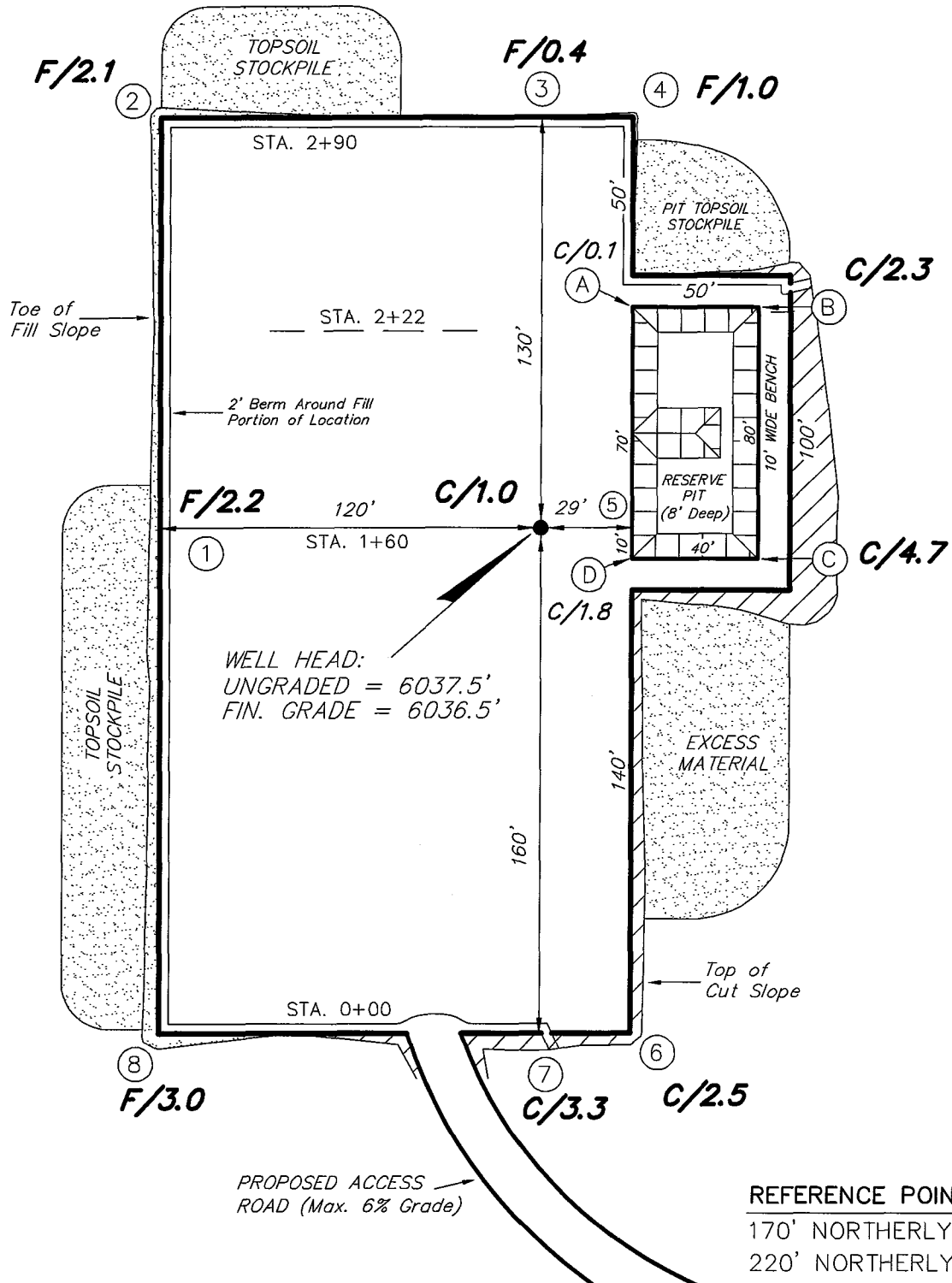
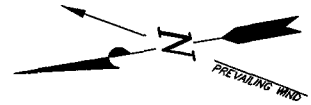


Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

9 MILE 1-20-9-16

Section 20, T9S, R16E, S.L.B.&M.



SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: L.C.S.

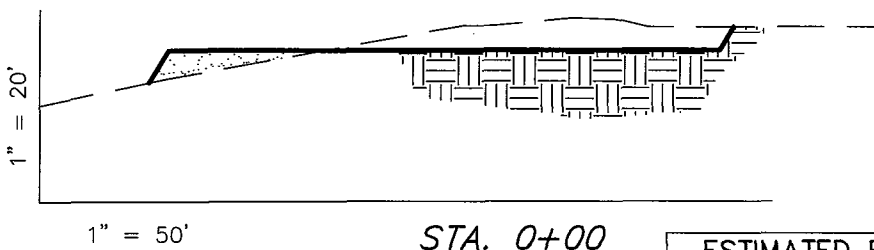
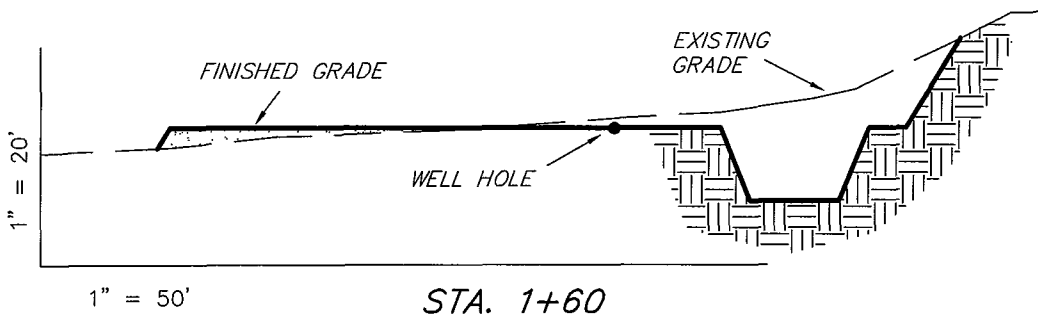
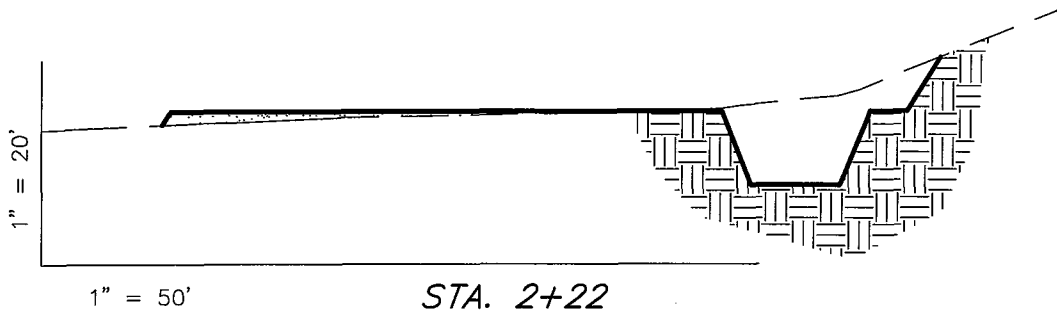
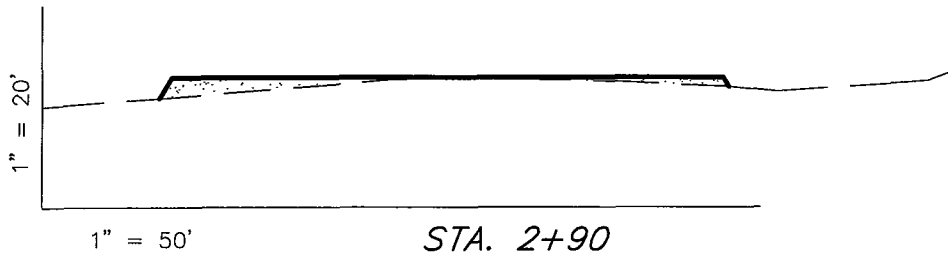
DATE: 01-09-06

**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

9 MILE 1-20-9-16



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES  
(No Shrink or swell adjustments have been used)  
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	1,240	1,240	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	1,880	1,240	970	640

SURVEYED BY: C.M.

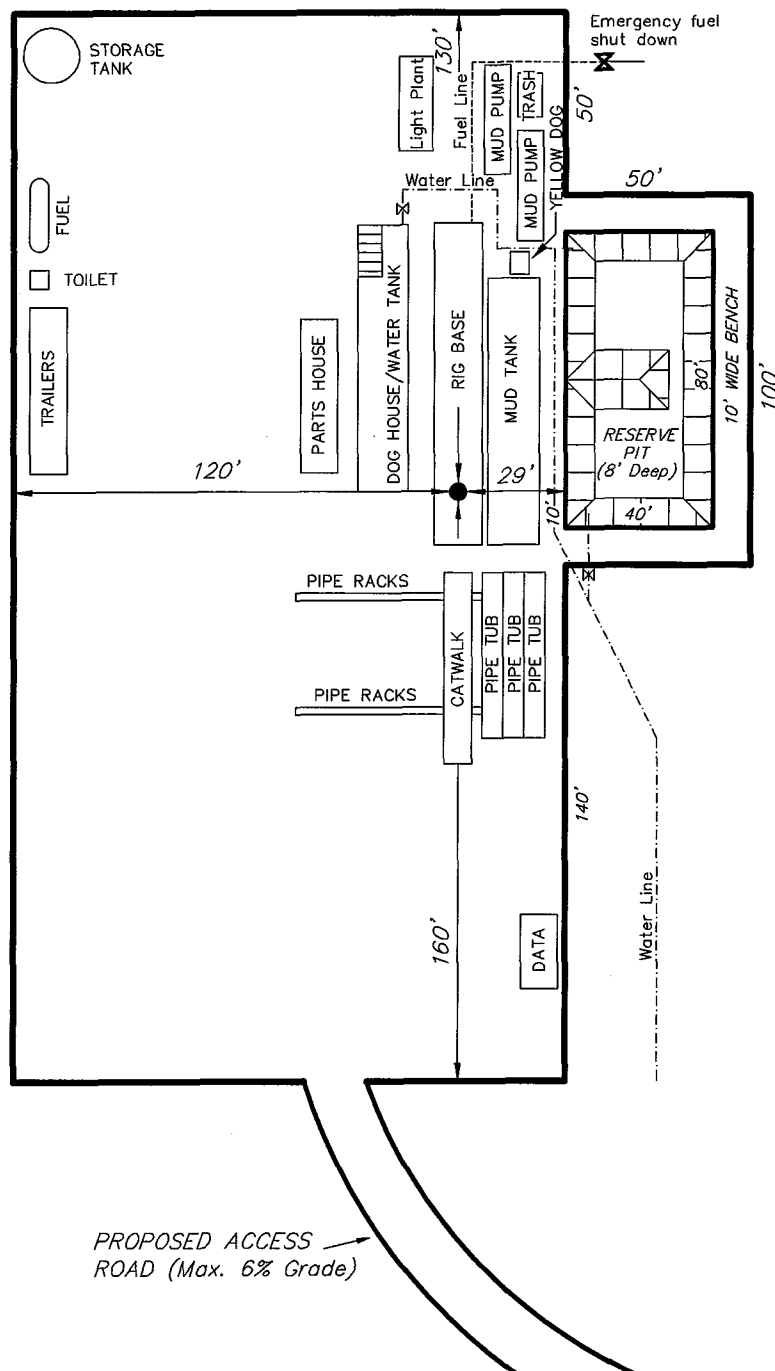
SCALE: 1" = 50'

DRAWN BY: L.C.S.

DATE: 01-09-06


Tri State  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

**NEWFIELD PRODUCTION COMPANY**  
**TYPICAL RIG LAYOUT**  
**9 MILE 1-20-9-16**



SURVEYED BY: C.M.	SCALE: 1" = 50'	<b>Tri State</b> <b>Land Surveying, Inc.</b> 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 (435) 781-2501
DRAWN BY: L.C.S.	DATE: 01-09-06	





**NEWFIELD**  
Exploration Company

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**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84478

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SCALE: 1 = 100,000  
DRAWN BY: mw  
DATE: 01-12-2006

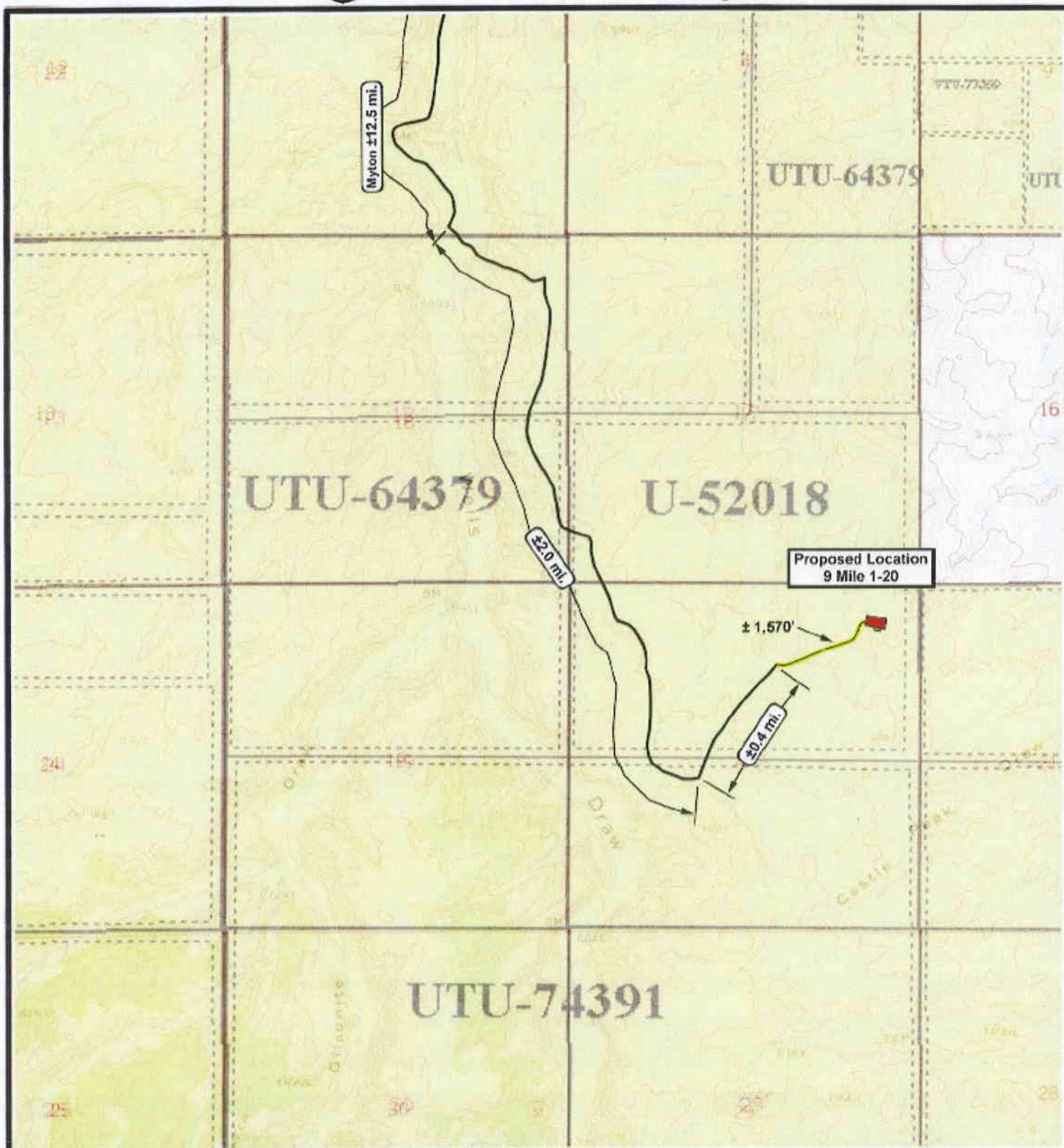
**Legend**

— Existing Road  
— Proposed Access

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**TOPOGRAPHIC MAP**

**"A"**



**NEWFIELD**  
Exploration Company

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**



*Pai-State*  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave., Vernal, Utah 84078

SCALE: 1" = 2000'

DRAWN BY: mw

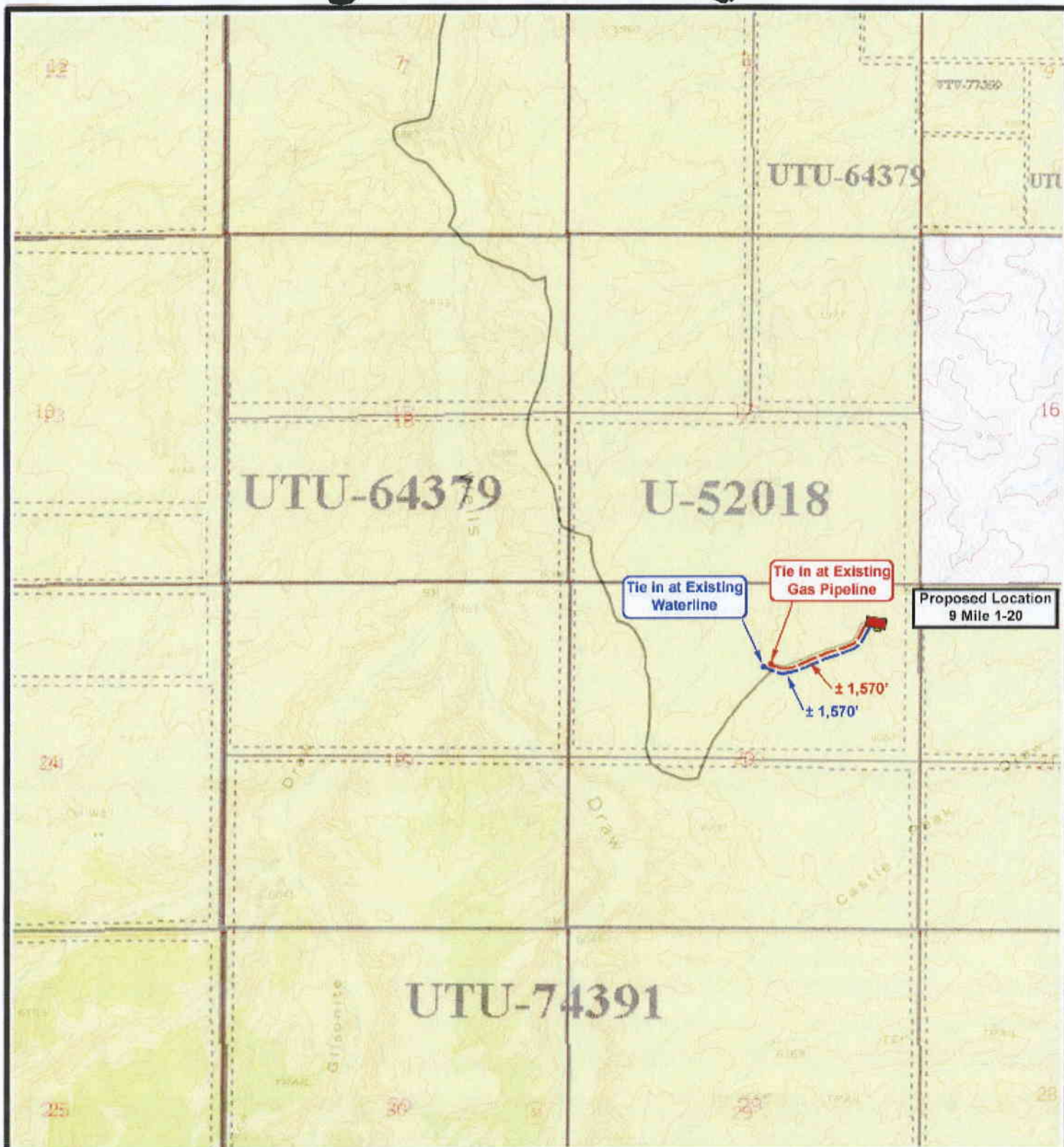
DATE: 01-12-2006

**Legend**

Existing Road  
 Proposed Access

TOPOGRAPHIC MAP

**"B"**



**NEWFIELD**  
Exploration Company

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**



*Tri-State*  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'

DRAWN BY: mw

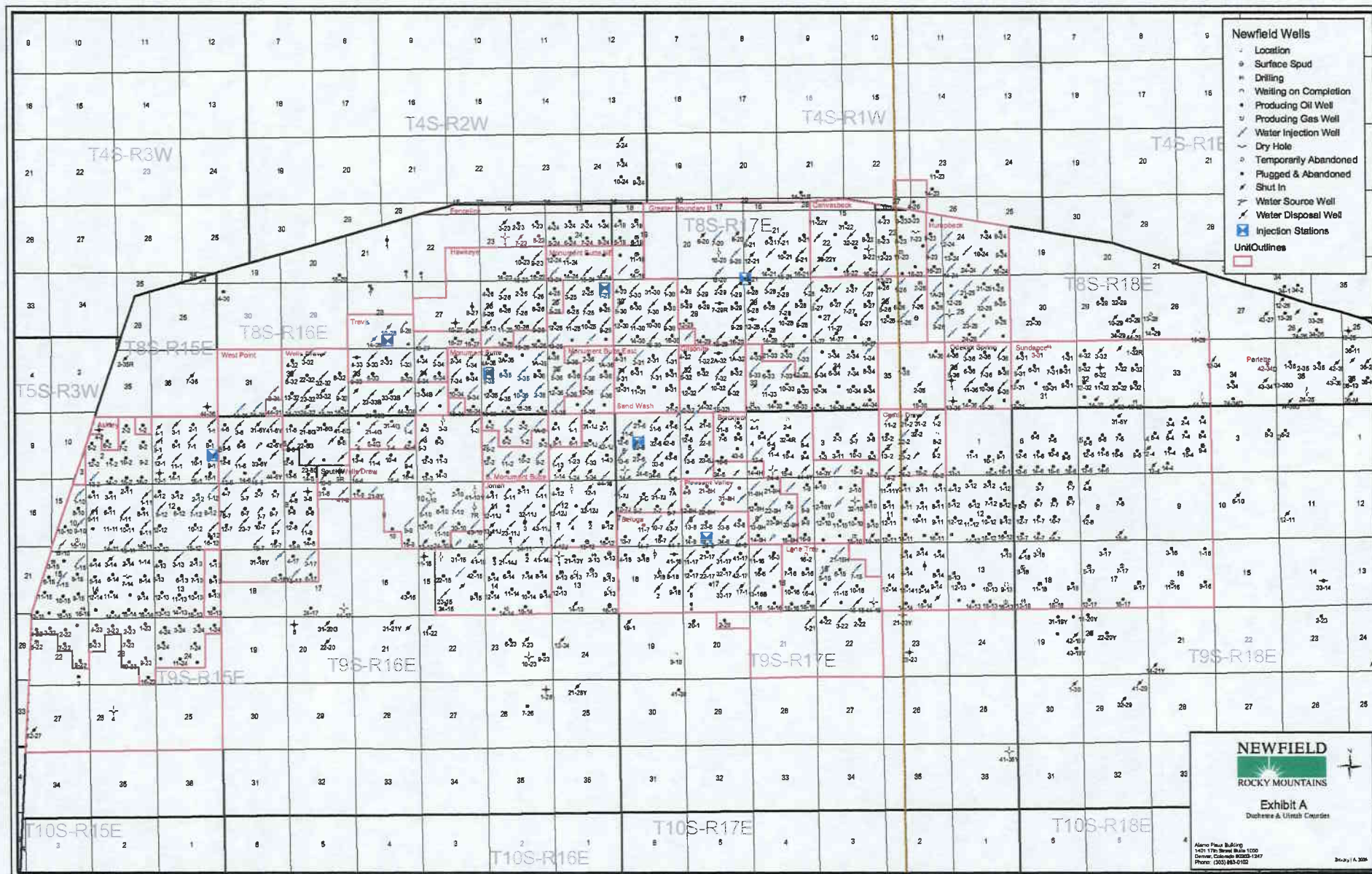
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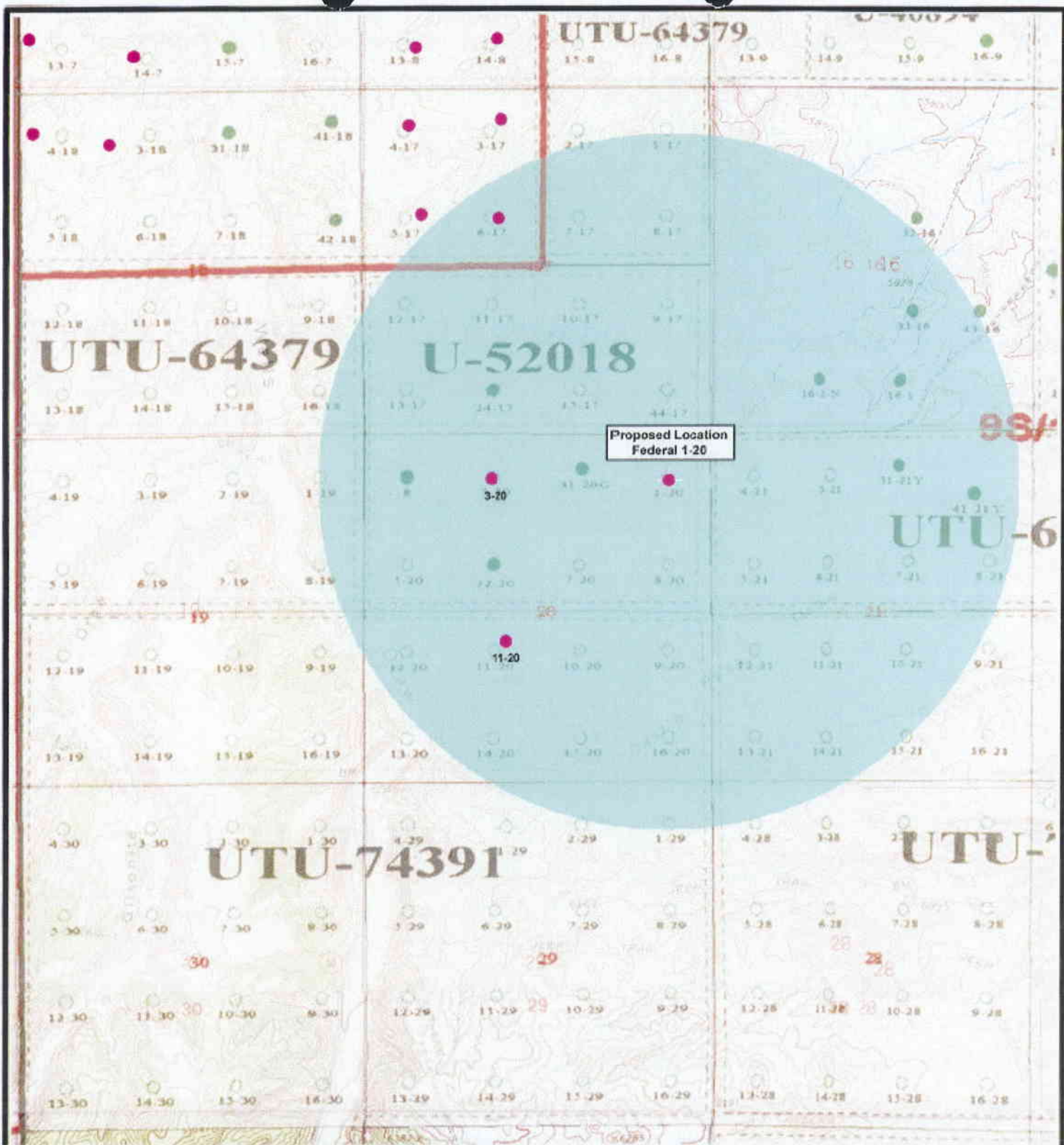
**Legend**




- Roads
- Proposed Gas Line
- Proposed Water Line

TOPOGRAPHIC MAP

**"C"**





 <p><b>NEWFIELD</b> Exploration Company</p>		 <p><b>Tri-State</b> Land Surveying Inc. (435) 781-2501 180 North Vernal Ave. Vernal, Utah 84078</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> Proposed Location</li> <li><span style="color: blue;">●</span> One-Mile Radius</li> </ul>
		<p>SCALE: 1" = 2,000'</p> <p>DRAWN BY: mw</p> <p>DATE: 01-12-2006</p>	<p><b>Exhibit "B"</b></p>

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**

## 2-M SYSTEM

Blowout Prevention Equipment Systems

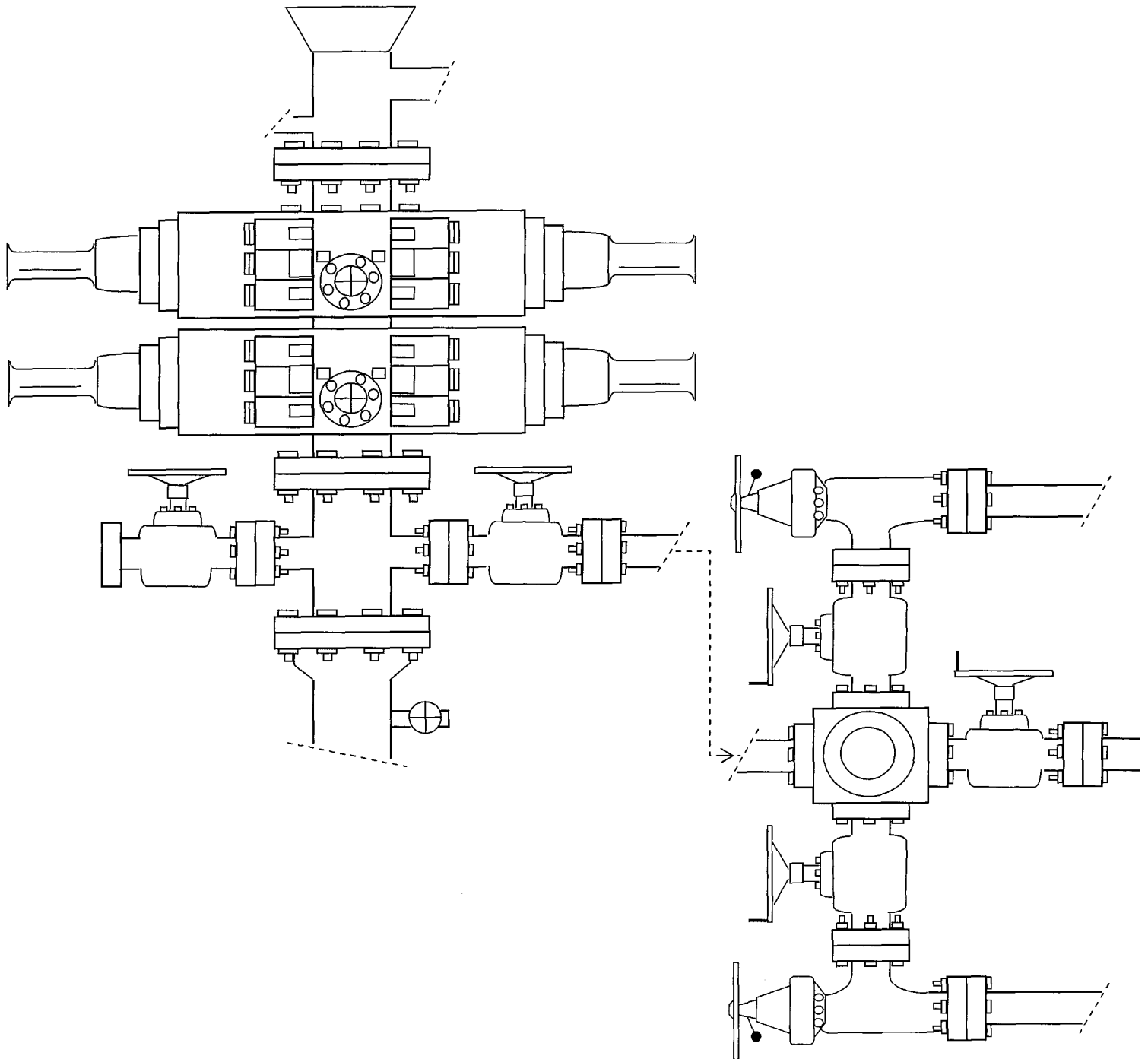


EXHIBIT C

Exhibit "D"  
Page 1 of 2

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S BLOCK PARCEL  
IN TOWNSHIP 9S, RANGE 16E, SECTION 19 AND 20,  
DUCHESNE COUNTY, UTAH

By:

Shari Maria Silverman

Prepared For:

Bureau of Land Management  
Vernal Field Office

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, UT 84052

Prepared By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 147  
Moab, Utah 84532

MOAC Report No. 05-225

July 13, 2005

United States Department of Interior (FLPMA)  
Permit No. 05-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-05-MQ-0668b

**NEWFIELD PRODUCTION COMPANY**

**PALEONTOLOGICAL FIELD SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
DUCHESNE COUNTY, UTAH**

Section 8, T 9 S, R 16 E [SW 1/4 & SE 1/4, NE 1/4; and SE 1/4]; Section 17, T 9 S, R 16 E [NE 1/4; NE 1/4, NW 1/4 & SW 1/4, SE 1/4; NE 1/4, NW 1/4, & SW 1/4, SW 1/4]; Section 19, T 9 S, R 16 E [entire section]; Section 20, T 9 S, R 16 E [excluding NW 1/4, NE 1/4; and NW 1/4 & SE 1/4, NW 1/4]; Section 21, T 9 S, R 16 E [excluding NE 1/4 & NW 1/4, NE 1/4]

**REPORT OF SURVEY**

Prepared for:

**Newfield Production Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
November 10, 2005

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/21/2006

API NO. ASSIGNED: 43-013-33066

WELL NAME: FEDERAL 1-20-9-16

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

NENE 20 090S 160E

SURFACE: 0617 FNL 0652 FEL

BOTTOM: 0617 FNL 0652 FEL

COUNTY: DUCHESNE

LATITUDE: 40.02189 LONGITUDE: -110.1354

UTM SURF EASTINGS: 573779 NORTHINGS: 4430334

FIELD NAME: MONUMENT BUTTE ( 105 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-52018

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTB000192 )

☒ Potash (Y/N)

☒ Oil Shale 190-5 (B) or 190-3 or 190-13

☒ Water Permit

(No. MUNICIPAL )

☒ RDCC Review (Y/N)

(Date: \_\_\_\_\_ )

☒ Fee Surf Agreement (Y/N)

☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

       R649-2-3.

Unit: \_\_\_\_\_

☒ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

       R649-3-3. Exception

       Drilling Unit

Board Cause No: \_\_\_\_\_

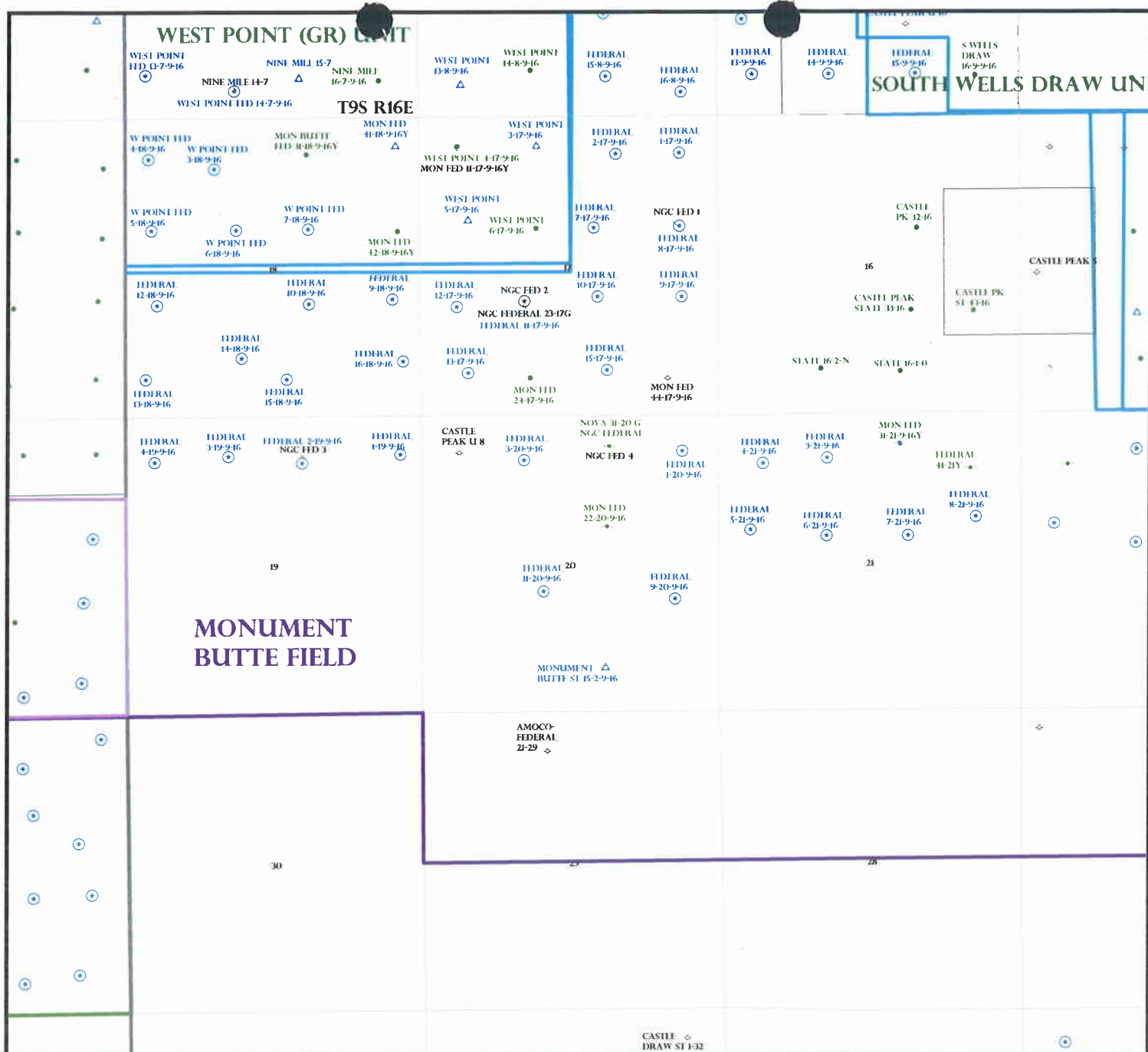
Eff Date: \_\_\_\_\_

Siting: \_\_\_\_\_

       R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 19,20,21 T. 9S R. 16E

FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

SPACING: R649-3-2 / GENERAL SITING

#### Field Status

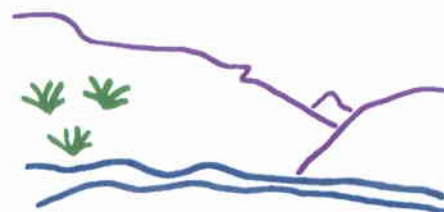
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

#### Unit Status

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

#### Wells Status

- ✱ GAS INJECTION
- ✱ GAS STORAGE
- ✱ LOCATION ABANDONED
- ✱ NEW LOCATION
- ✱ PLUGGED & ABANDONED
- ✱ PRODUCING GAS
- ✱ PRODUCING OIL
- ✱ SHUT-IN GAS
- ✱ SHUT-IN OIL
- ✱ TEMP. ABANDONED
- ✱ TEST WELL
- ✱ WATER INJECTION
- ✱ WATER SUPPLY
- ✱ WATER DISPOSAL
- ✱ DRILLING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 23-FEBRUARY-2006



**State of Utah**

**Department of  
Natural Resources**

**MICHAEL R. STYLER**  
*Executive Director*

**Division of  
Oil, Gas & Mining**

**JOHN R. BAZA**  
*Division Director*

**JON M. HUNTSMAN, JR.**  
*Governor*

**GARY R. HERBERT**  
*Lieutenant Governor*

February 23, 2006

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Federal 1-20-9-16 Well, 617' FNL, 652' FEL, NE NE, Sec. 20, T. 9 South,  
R. 16 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33066.

Sincerely,

**Gil Hunt**  
Associate Director

pab  
Enclosures

cc: **Duchesne County Assessor**  
**Bureau of Land Management, Vernal District Office**

Operator: Newfield Production Company  
Well Name & Number Federal 1-20-9-16  
API Number: 43-013-33066  
Lease: UTU-52018

Location: NE NE Sec. 20 T. 9 South R. 16 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

**UTU-52018**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**N/A**

8. Well Name and No.

**FEDERAL 1-20-9-16**

9. API Well No.

**43-013-33066**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**DUCHESNE COUNTY, UT.**

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**NEWFIELD PRODUCTION COMPANY**

3. Address and Telephone No.

**Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**617 FNL 652 FEL NE/NE Section 20, T9S R16E**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**TYPE OF SUBMISSION**

☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

**TYPE OF ACTION**

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other **Permit Extension**

☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 2/23/06 (expiration 2/23/07).

This APD has not been approved yet by the BLM.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: **02-07-07**

By: **[Signature]**

**2-8-07**  
**Rm**

**FEB 06 2007**

14. I hereby certify that the foregoing is true and correct

Signed

**Mandie Crozier**

Title

**Regulatory Specialist**

Date

**2/2/2007**

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

CC: Utah DOGM

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-013-33066  
**Well Name:** Federal 1-20-9-16  
**Location:** NE/NE Section 20,T9S R16E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 2/23/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒ *A*

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

*Mandi Cuzin*  
\_\_\_\_\_  
Signature

2/2/2007

\_\_\_\_\_  
Date

Title: Regulatory Specialist

Representing: Newfield Production Company

FEB 06 2007

Form 3160-3  
(September 2001)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

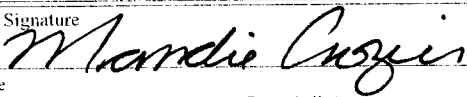
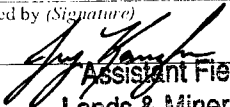
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER			FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone			5. Lease Serial No. UTU-52018	
2. Name of Operator Newfield Production Company			6. If Indian, Allottee or Tribe Name N/A	
3a. Address Route #3 Box 3630, Myton UT 84052		3b. Phone No. (include area code) (435) 646-3721		7. If Unit or CA Agreement, Name and No. N/A
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NE/NE 617' FNL 652' FEL At proposed prod. zone			8. Lease Name and Well No. Federal 1-20-9-16	
14. Distance in miles and direction from nearest town or post office* Approximatley 15.2 miles southwest of Myton, Utah			9. API Well No. 43-013-33066	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 652' f/lse, NA' f/unit		16. No. of Acres in lease 640.00	10. Field and Pool, or Exploratory Monument Butte	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1369'		19. Proposed Depth 6040'	11. Sec., T., R., M., or Blk. and Survey or Area NE/NE Sec. 20, T9S R16E	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6036' GL		22. Approximate date work will start* 2nd Quarter 2006	12. County or Parish Duchesne	13. State UT
17. Spacing Unit dedicated to this well 40 Acres				
20. BLM/BIA Bond No. on file UTB000192				
23. Estimated duration Approximately seven (7) days from spud to rig release.				

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 2/17/06
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) Terry Kewels	Date 2-7-2007
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

FEB 13 2007

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

UDOGM

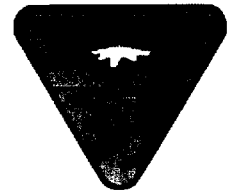
No NOS

07BM4687A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Production Company  
Well No: Federal 1-20-9-16  
API No: 43-013-33066

Location: NENE, Sec 20, T9S, R16E  
Lease No: UTU-52018  
Agreement: N/A

Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	Cell: 435-828-7875
Petroleum Engineer:	Jim Ashley	Office: 435-781-4470	Cell: 435-828-7874
Petroleum Engineer:	Ryan Angus	Office: 435-781-4430	
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
Environmental Scientist:	Karl Wright	Office: 435-781-4484	
Natural Resource Specialist:	Holly Villa	Office: 435-781-4404	
Natural Resource Specialist:	Melissa Hawk	Office: 435-781-4476	
Natural Resource Specialist:	Chuck Macdonald	Office: 435-781-4441	
Natural Resource Specialist:	Darren Williams	Office: 435-781-4447	
Natural Resource Specialist:	Verlyn Pindell	Office: 435-781-3402	
After Hours Contact Number: 435-781-4513		Fax: 435-781-4410	

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

- |   |  |
|---|--|
| Location Construction<br>(Notify Chuck Macdonald)       | - Forty-Eight (48) hours prior to construction of location and access roads.   |
| Location Completion<br>(Notify Chuck Macdonald)         | - Prior to moving on the drilling rig.   |
| Spud Notice<br>(Notify Petroleum Engineer)              | - Twenty-Four (24) hours prior to spudding the well.   |
| Casing String & Cementing<br>(Notify Jamie Sparger)     | - Twenty-Four (24) hours prior to running casing and cementing all casing strings.   |
| BOP & Related Equipment Tests<br>(Notify Jamie Sparger) | - Twenty-Four (24) hours prior to initiating pressure tests.   |
| First Production Notice<br>(Notify Petroleum Engineer)  | - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days. |

UDOGM

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

**LEASE STIPULATIONS**

- Lands in this lease have been identified as containing Golden eagle habitat. Modifications to the Surface Use Plan of Operations may be required in order to protect the Golden eagle and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

**GENERAL CONDITIONS OF APPROVAL**

- This well is being approved in accordance with Washington Instruction Memorandum 2005-247 and Section 390 (Category 3) of the Energy Policy Act which establishes statutory categorical exclusions (CX) under the National Environmental Policy Act (NEPA). Category 3 states that an oil or gas well can be drilled within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. This well is covered under the *Final Environmental Impact Statement and Record of Decision Castle Peak and Eightmile Flat Oil and Gas Exploration Project Newfield Rocky Mountains Inc.*, signed August 24, 2005. If the well has not been spudded by August 24, 2010, a new environmental document will have to be prepared prior to the approval of the APD.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 12 ml or greater liner and felt prior to spudding.

- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If paleontologic or cultural materials are uncovered during construction, the operator shall immediately stop work that might further disturb or move such materials and contact the Authorized Officer (AO) within 48 hours. A determination will be made by the AO as to necessary mitigation for the discovered paleontologic/cultural material.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- The interim seed mix for this location shall be:

Indian Ricegrass ( <i>Oryzopsis hymenoides</i> )	4 lbs/acre
Needle and Threadgrass ( <i>Stipa comata</i> ):	4 lbs/acre
Scarlet Globemallow ( <i>Sphaeralcea coccinea</i> ):	1 lb/acre
Winter Fat ( <i>Ceratoides lanata</i> )	3 lbs/acre

- All pounds are in pure live seed.
  - Rates are set for drill seeding; double the rate if broadcasting.
  - Reseeding may be required if initial seeding is not successful.
- The operator will be responsible for treatment and control of invasive and noxious weeds.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (preferably of native origin). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.

- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.
- Operator shall notify any active gilsonite mining operation within 2 miles of the location 48 hours prior to any blasting during construction for this well.

### ***DOWNHOLE CONDITIONS OF APPROVAL***

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

#### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

1. A variance is granted for O.O. #2 III. E. 1.
  - a. The blooie line shall be straight or have targeted tees for bends in the line.
  - b. Not requiring an automatic igniter or continuous pilot on the blooie line.
2. Run a cement bond log from TD to the base of the surface casing shoe.

#### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

1. There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
2. The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
3. **Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.**
4. Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

No aggressive/fresh hard-banded drill pipe shall be used within casing.

Cement baskets shall not be run on surface casing.

5. The lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
6. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
7. The lessee/operator must report encounters of all non oil and gas mineral resources (such as gilsonite, tar sands, oil shale, etc.) to the Vernal Field Office in writing within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
8. No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM, Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM, Vernal Field Office shall be obtained and notification given before resumption of operations.
9. Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

Any change in the program shall be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) shall be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.

In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

10. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys,

sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

**Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

11. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease shall have prior written approval from the BLM, Vernal Field Office.

All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.

12. Oil and gas meters shall be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
13. A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
14. This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - a. Operator name, address, and telephone number.
  - b. Well name and number.
  - c. Well location (1/4, Sec., Twn, Rng, and P.M.).
  - d. Date well was placed in a producing status (date of first production for which royalty will be paid).
  - e. The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

- f. The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - g. Unit agreement and / or participating area name and number, if applicable.
  - h. Communitization agreement number, if applicable.
- 15. Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.
- 16. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production
- 17. Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- 18. Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
USA UTU-52018  
6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.  
FEDERAL 1-20-9-16

9. API Well No.  
4301333066

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, UT

SUBMITTER'S COMMENTS AND Other Instructions on reverse side.

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052  
3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
617 FNL 652 FEL  
NENE Section 20 T9S R16E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Spud Notice _____
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 5/16/07 MIRU NDSI NS #1. Spud well @ 12:30pm. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csng. Set @ 324.21' On 5/20/07 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 7 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

05/20/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED

MAY 22 2007

DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 324.21

LAST CASING 8 5/8" SET AT 324.21'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 320' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR NewField Production Company  
 WELL Federal 1-20-9-16  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # NSDI NS #1

LOG OF CASING STRING:								
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH	
		Shoe Joint 44.70'						
		WHI - 92 csg head			8rd	A	0.95	
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	312.36	
		<b>GUIDE</b> shoe			8rd	A	0.9	
CASING INVENTORY BAL.			FEET	JTS	TOTAL LENGTH OF STRING			314.21
TOTAL LENGTH OF STRING			314.21	7	LESS CUT OFF PIECE			2
LESS NON CSG. ITEMS			1.85		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT			0		CASING SET DEPTH			<b>324.21</b>
TOTAL			312.36	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)			312.36	7				
TIMING			1ST STAGE					
BEGIN RUN CSG. Spud			5/16/2007	12:30 PM	GOOD CIRC THRU JOB			Yes
CSG. IN HOLE			5/17/2007	10:00 AM	Bbls CMT CIRC TO SURFACE			7
BEGIN CIRC			5/20/2007	9:23 AM	RECIPROCATED PIPE FOR			THRU FT STROKE
BEGIN PUMP CMT			5/20/2007	9:35 AM				N/A
BEGIN DSPL. CMT			5/20/2007	9:47 AM	BUMPED PLUG TO			140 PSI
PLUG DOWN			5/20/2007	10:07 AM				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>						
STAGE	# SX	CEMENT TYPE & ADDITIVES						
1	160	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield						
CENTRALIZER & SCRATCHER PLACEMENT		SHOW MAKE & SPACING						
Centralizers - Middle first, top second & third for 3								

COMPANY REPRESENTATIVE Don Bastian DATE 5/20/2007

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM - FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3638  
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	16/37	4301333066	FEDERAL 1-20-9-16	NENW	20	9S	16E	DUCHESNE	5/17/2007	5/30/07
WELL 1 COMMENTS: GRV											
B	99999	14844	4304738193	Sundance FEDERAL 14-1-9-17	NENW	12	9S	17E	DUCHESNE	5/18/2007	5/30/07
GRV BHL = SE SW SEC 1											
A	99999	16/38	4301332921	FEDERAL 10-18-9-16	NWSE	18	9S	16E	DUCHESNE	5/18/2007	5/30/07
GRV											
A	99999	16/39	4301333136	FEDERAL 13-15-9-16	SWSW	15	9S	16E	DUCHESNE	5/22/2007	5/30/07
GRV											
B	99999	12418	4301332919	FEDERAL 7-18-9-16	SWNE	18	9S	16E	DUCHESNE	5/22/2007	5/30/07
WELL 5 COMMENTS: GRV West Point											
A	99999	16/40	4301333164	FEDERAL 15-21-9-16	SWSE	21	9S	16E	DUCHESNE	5/16/2007	5/30/07
WELL 5 COMMENTS: GRV											

ACTION CODES (See instructions on back of form)

- A - new entity for new well (single well only)
- B - well to existing entity (group or unit well)
- C - from one existing entity to another existing entity
- D - well from one existing entity to a new entity
- E - other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED

MAY 23 2007

DIV. OF OIL, GAS & MINING

*Jentri Park*  
Signature  
Jentri Park  
Production Clerk  
April 18, 2007  
Date

# DIVISION OF OIL, GAS AND MINING

## ***SPUDDING INFORMATION***

Name of Company: Newfield Production Company

Well Name: Federal 1-20-9-16

API No: 43-013-33066 Lease Type: Federal

Section 20 Township 09S Range 16E County Duchesne

Drilling Contractor NDSI Rig # NS#1

### **SPUDDED:**

Date 5-16-07

Time 12:30 PM

How Dry

***Drilling will Commence:*** \_\_\_\_\_

Reported by Troy Zufeit

Telephone # 435-823-6013

Date 5-18-07 Signed RM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

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5. Lease Serial No.  
USA UTU-52018  
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7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.  
FEDERAL 1-20-9-16

9. API Well No.  
4301333066

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, UT

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
617 FNL 652 FEL  
NENE Section 20 T9S R16E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 6/23/07 MIRU Patterson # 155. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 277'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6050'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 136 jt's of 5.5 J-55, 15.5# csgn. Set @ 6029.08 / KB. Cement with 325 sks cement mixed @ 11.0 ppg & 3.43 yld. The 425 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 13 bbls of cement to reserve pit. Nipple down Bop's. Drop slips @ 120,000 #'s tension. Release rig @ 2:30pm 6/30/07.

RECEIVED

JUL 03 2007

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and  
correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

06/30/2007

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or  
certify that the applicant holds legal or equitable title to those rights in the subject lease  
which would entitle the applicant to conduct operations thereon.

Title

Date

Office

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States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6029.08

Flt cllr @ 6002.84

LAST CASING 8 5/8" SET # 323.65'

OPERATOR Newfield Production Company

DATUM 12' KB

WELL Federal 1-20-9-16

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

DATUM TO BRADENHEAD FLANGE \_\_\_\_\_

CONTRACTOR & RIG # Patterson #155

TD DRILLER 6040 Loggers

HOLE SIZE 7 7/8"

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		Short jt 4301' (5.85')					
136	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	5990.83
		Float collar					0.6
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	25
		<b>GUIDE</b> shoe			8rd	A	0.65
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			6031.08
TOTAL LENGTH OF STRING		6031.08	143	LESS CUT OFF PIECE			14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		243.17	6	CASING SET DEPTH			<b>6029.08</b>
TOTAL		<b>6259.00</b>	143	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		6259	143				
TIMING		1ST STAGE	2nd STAGE				
BEGIN RUN CSG.		2:00AM	6/30/2007	GOOD CIRC THRU JOB <u>YES</u>			
CSG. IN HOLE		6:30 AM	6/30/2007	Bbls CMT CIRC TO SURFACE <u>13</u>			
BEGIN CIRC		6:30 AM	6/30/2007	RECIPROCATED PIPE FOR <u>THRUSTROKE</u> NA			
BEGIN PUMP CMT		8:18 AM	6/30/2007	DID BACK PRES. VALVE HOLD ? <u>YES</u>			
BEGIN DSPL. CMT		9:19 AM	6/30/2007	BUMPED PLUG TO <u>1450</u> PSI			
PLUG DOWN		9:42 AM	6/30/2007				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	325	Premlite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake					
		mixed @ 11.0 ppg W / 3.49 cf/sk yield					
2	425	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1,1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD					
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING				
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.							

COMPANY REPRESENTATIVE Don Bastian

DATE 6/30/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address

Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

617 FNL 652 FEL

NENE Section 20 T9S R16E

5. Lease Serial No.

USA UTU-52018

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7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.

FEDERAL 1-20-9-16

9. API Well No.

4301333066

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY**

I hereby certify that the foregoing is true and  
correct (Printed/ Typed)

Mandie Crozier

Signature

Title

Regulatory Specialist

Date

07/30/2007

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

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certify that the applicant holds legal or equitable title to those rights in the subject lease  
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Office

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(Instructions on reverse)

**RECEIVED**  
**AUG 02 2007**

DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.


1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-52018
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 617 FNL 652 FEL		8. WELL NAME and NUMBER: FEDERAL 1-20-9-16
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENE, 20, T9S, R16E		9. API NUMBER: 4301333066
		10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE
		COUNTY: DUCHESNE
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  07/31/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Weekly Status Report
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 07/25/07, attached is a daily completion status report.

NAME (PLEASE PRINT) <u>Jentri Park</u>	TITLE <u>Production Clerk</u>
SIGNATURE 	DATE <u>07/31/2007</u>

(This space for State use only)

**RECEIVED**  
**AUG 07 2007**

DIV. OF OIL, GAS & MINING

**Daily Activity Report**

Format For Sundry

**FEDERAL 1-20-9-16****5/1/2007 To 9/30/2007****7/11/2007 Day: 1****Completion**

Rigless on 7/10/2007 - Install 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5929' & cement top @ 60'. Perforate stage #1. CP1 sds @ 5526-44' w/ 3 1/8" Slick guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 72 shots. 143 BWTR. SIFN.

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**7/20/2007 Day: 2****Completion**

Rigless on 7/19/2007 - NU BJ Services "Ram head" frac flange. RU BJ & frac stage #1 (CP1 sds) W/ 40,327# 20/40 sand in 416 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 2756 psi. Treated @ ave press of 2186 psi W/ ave rate of 24.7 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #2. ISIP--2165 psi. Leave pressure on well. Est 559 BWTR. RU Perforators WLT, crane & lubricater. Run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 5230'. Perf stage #2 (LODC sds) @ 5124-38' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #2 W/ 60,273# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 3621 psi (on third attempt of pressuring against perfs). Treated @ ave press of 2674 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #3. ISIP--2760 psi. Leave pressure on well. Est 1069 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 15' X 3/18" slick perf gun. Set plug @ 4900'. Perf stage #3 (C sds) @ 4780-95' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #3 W/ 60,060# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 4170 psi (on sixth attempt of pressuring against perfs). Treated @ ave press of 1833 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #4. ISIP--1800 psi. Leave pressure on well. Est 1579 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 4740'. Perf stage #4 (D2 sds) @ 4680-94' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #4. Unable to breakdown perfs after several attempts W/ 4200 psi max. RU WLT & RIH W/ 3 1/2" dumpbailer W/ 8 gals 15% HCL acid. Tag sd @ 4661'. Dump acid & LD bailer. Flow well back on chokes for 2 1/2 hrs, rec est 150 BTF. Recovered acid & strung out sand. Flowing fairly clean @ end. Casing pressure @ 150 psi. RU BJ & breakdown D2 perfs @ 1889 psi. Frac stage #4 W/ 79,938# 20/40 sand in 623 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Treated @ ave press of 1860 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #5. ISIP--1960 psi. Leave pressure on well. Est 2052 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 7' X 3/18" slick perf gun. Set plug @ 4250'. Perf stage #5 (GB6 sds) @ 4160-67' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #5. Pressure against perfs to 4200 psi--holding solid. \*\*BJ Blender will not run !!! Shut well in with pressure overnight. Est 2052 BWTR.

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**7/21/2007 Day: 3****Completion**

NC #1 on 7/20/2007 - 2250 psi on well. RU BJ Services & breakdown stage #5 (GB6 sds) @ 4201 psi. Frac stage #5 W/ 28,569# 20/40 sand in 317 bbls Lightning frac 17 fluid. Treated @ ave press of 1594 psi W/ ave rate of 24.9 BPM. ISIP--1545 psi. RD BJ & WLT. Begin immediate flowback of frac on 12/64 choke @ 1 BPM. Zone flowed 2.5 hrs rec add'l 135 BTF (est 12% of combined frac load of 2376 bbls-- includes 150 bbls f/ previous FB). MIRU NC #1. ND Cameron BOP & 5M frac head. Install 3M production tbg head & NU Weatherford Schaeffer BOP. Talley, PU & TIH W/ new Weatherford 4 3/4" "Chomp" bit, bit sub & new 2 7/8 8rd 6.5# J-55 tbg. Tag fill @ 4181'. Tbg displaced 10 BW on TIH. RU power swivel. C/O sd to composite plug @ 4250'. Drill out plug in 25 minutes. Circ hole clean W/ no fluid loss. Hang back swivel. SIFN W/ EOT @ 4313'. Est 2224 BWTR.

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**7/24/2007 Day: 4**

**Completion**

NC #1 on 7/23/2007 - 6:30 AM OWU, Swvl I/Hle To Plg @ 4740', Drill Up Plg, Swvl I/Hle To Fill @ 4878', C/Out To Plg @ 4900', Drill Up Plg, Swvl I/Hle To Fill @ 5145', C/Out To Plg @ 5230', Drill Up Plg, Swvl I/Hle To Fill @ 5750', Drill & C/Out To PBTD @ 5957.82' KB, Curc Well Clean 1 Hr, R/D Swvl, POOH W/-5 Jts Tbg EOB @ 5819', R/U Swab, Made 15 Swab Runs, Recvred 177 Bbls Wtr, Lite Trce Sand, Lite Trce Oil, FFL @ 1600', SWI, 6:30PM C/SDFN, Lost 123 Bbls Wtr On Drill Out To PBTD, Recvred 177 Bbls Wtr Swabbing, Total Wtr Recvery For Day = 54 Bbls.

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**7/25/2007 Day: 5**

**Completion**

NC #1 on 7/24/2007 - 6:30 AM OWU, RIH W/-5 Jts Tbg To Fill @ 5952', R/U R/pmp & C/Out To PBTD @ 5957.82', Curc Well Clean, POOH W/-194 Jts Tbg, Bit Sub & Bit. P/U & RIH W/-Tbg Production Detail Shown Below. N/D BOP, Set 5 1/2 T/A In 15,000 Tension, N/U W/-HD. R/U R/pmp, Flsh Tbg W/-60 Bbls Wtr. P/U Stroke & RIH W/- CDI-2 1/2x1 1/2x16x20' RHAC, 6-1 1/2x25' Wt Bars, 20-3/4x25' Guided Rods, 50- 3/4x25' Slick Rods, SWI, 6:30PM C/SDFN. Lost 87 Bbls Wtr On Curc Out To PBTD.

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**7/26/2007 Day: 6**

**Completion**

NC #1 on 7/25/2007 - 6:30 AM OWU, RIH 45-3/4X25' Slick Rods, 100-3/4X25' Guided Rods, 3/4X8'-6'-4'-2' Ponys, 1 1/2X26' Polish Rod, R/U Unit, R/U Rig Pump, Fill Tbg W/-1 Bbl Wtr, Stroke Unit & Tbg To 800 Psi, Good Test. R/D Eq, R/D Rig. POP @ 10:30AM , 120" SL, 5 SPM, ( Final Report )

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**Pertinent Files: Go to File List**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

**1a. TYPE OF WORK**

OIL WELL ☒ GAS WELL ☐ DRY ☐ Other \_\_\_\_\_

**1b. TYPE OF WELL**

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR. ☐ Other \_\_\_\_\_

**2. NAME OF OPERATOR**

Newfield Exploration Company

**3. ADDRESS AND TELEPHONE NO.**

1401 17th St. Suite 1000 Denver, CO 80202

**4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)\***

At Surface 617' FNL & 652' FEL (NE/NE) Sec. 20, T9S, R16E

At top prod. Interval reported below

At total depth

**14. API NO.**

43-013-33066

**DATE ISSUED**

02/23/07

**12. COUNTY OR PARISH**

Duchesne

**13. STATE**

UT

**15. DATE SPUDDED**

05/16/07

**16. DATE T.D. REACHED**

06/29/07

**17. DATE COMPL. (Ready to prod.)**

07/25/07

**18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\***

6038' GL

**19. ELEV. CASINGHEAD**

6050' KB

**20. TOTAL DEPTH, MD & TVD**

6050'

**21. PLUG BACK T.D., MD & TVD**

5958'

**22. IF MULTIPLE COMPL., HOW MANY\***

**23. INTERVALS DRILLED BY**

----->

**ROTARY TOOLS**

X

**CABLE TOOLS**

**24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\***

Green River 4160'-5544'

**25. WAS DIRECTIONAL SURVEY MADE**

No

**26. TYPE ELECTRIC AND OTHER LOGS RUN**

Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log

**27. WAS WELL CORED**

No

**23. CASING RECORD (Report all strings set in well)**

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	324'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6029'	7-7/8"	325 sx Premilite II and 425 sx 50/50 Poz	

**29. LINER RECORD**

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

**30. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	EOT @ 5615'	TA @ 5518'

**31. PERFORATION RECORD (Interval, size and number)**

INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(CP1) 5526'-5544'	.49"	4/72	5526'-5544'	Frac w/ 40,327# 20/40 sand in 416 bbls fluid
(LODC) 5124'-5138'	.43"	4/56	5124'-5138'	Frac w/ 60,273# 20/40 sand in 510 bbls fluid
(C) 4780'-4795'	.43"	4/60	4780'-4795'	Frac w/ 60,060# 20/40 sand in 510 bbls fluid
(D2) 4680'-4694'	.43"	4/56	4680'-4694'	Frac w/ 49,938# 20/40 sand in 623 bbls fluid
(GB6) 4160'-4167'	.43"	4/28	4160'-4167'	Frac w/ 28,569# 20/40 sand in 317 bbls fluid

**33.\* PRODUCTION**

<b>DATE FIRST PRODUCTION</b> 07/25/07		<b>PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)</b> 2-1/2" x 1-1/2" x 16' x 20' RHAC SM Plunger Pump				<b>DIV. OF OIL, GAS &amp; MIN. (Producing or shut-in)</b> PRODUCING	
<b>DATE OF TEST</b> 10 day ave	<b>HOURS TESTED</b>	<b>CHOKE SIZE</b>	<b>PROD'N. FOR TEST PERIOD</b> ----->	<b>OIL--BBL.</b> 26	<b>GAS--MCF.</b> 0	<b>WATER--BBL.</b> 87	<b>GAS-OIL RATIO</b> 0
<b>FLOW. TUBING PRESS.</b>	<b>CASING PRESSURE</b>	<b>CALCULATED 24-HOUR RATE</b> ----->	<b>OIL--BBL.</b>	<b>GAS--MCF.</b>	<b>WATER--BBL.</b>	<b>OIL GRAVITY-API (CORR.)</b>	

**34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)**

Sold & Used for Fuel

**TEST WITNESSED BY**

**35. LIST OF ATTACHMENTS**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

*[Signature]*  
Jentri Park

TITLE

Production Clerk


DATE

8/10/2007

JP

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			Well Name Federal 1-20-9-16	Garden Gulch Mkr	3635'	
				Garden Gulch 1	3833'	
				Garden Gulch 2	3940'	
				Point 3 Mkr	4186'	
				X Mkr	4450'	
				Y-Mkr	4482'	
				Douglas Creek Mkr	4597'	
				BiCarbonate Mkr	4834'	
				B Limestone Mkr	4930'	
				Castle Peak	5488'	
				Basal Carbonate	5926'	
				Total Depth (LOGGERS)	6030'	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/12/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p>The subject well has been converted from a producing oil well to an injection well on 10/09/2012. On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test.</p>		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto		<b>PHONE NUMBER</b> 435 646-4874
<b>SIGNATURE</b> N/A		<b>TITLE</b> Water Services Technician
<b>DATE</b> 10/19/2012		<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> October 22, 2012 <b>By:</b> 

# Mechanical Integrity Test Casing or Annulus Pressure Test

Newfield Production Company  
Rt. 3 Box 3630  
Myton, UT 84052  
435-646-3721

Witness: \_\_\_\_\_ Date 10/12/16 Time 11:30 am pm  
Test Conducted by: Riley Bugh  
Others Present: \_\_\_\_\_

Well: <u>Federal 1-20-9-16</u>	Field: <u>Monument B-Hr</u>
Well Location: <u>Federal 1-20-9-16</u>	API No: <u>4301333066</u>

<u>Time</u>	<u>Casing Pressure</u>	
0 min	<u>1575</u>	psig
5	<u>1575</u>	psig
10	<u>1575</u>	psig
15	<u>1575</u>	psig
20	<u>1575</u>	psig
25	<u>1575</u>	psig
30 min	<u>1575</u>	psig
35	_____	psig
40	_____	psig
45	_____	psig
50	_____	psig
55	_____	psig
60 min	_____	psig

Tubing pressure: 150 psig

Result:

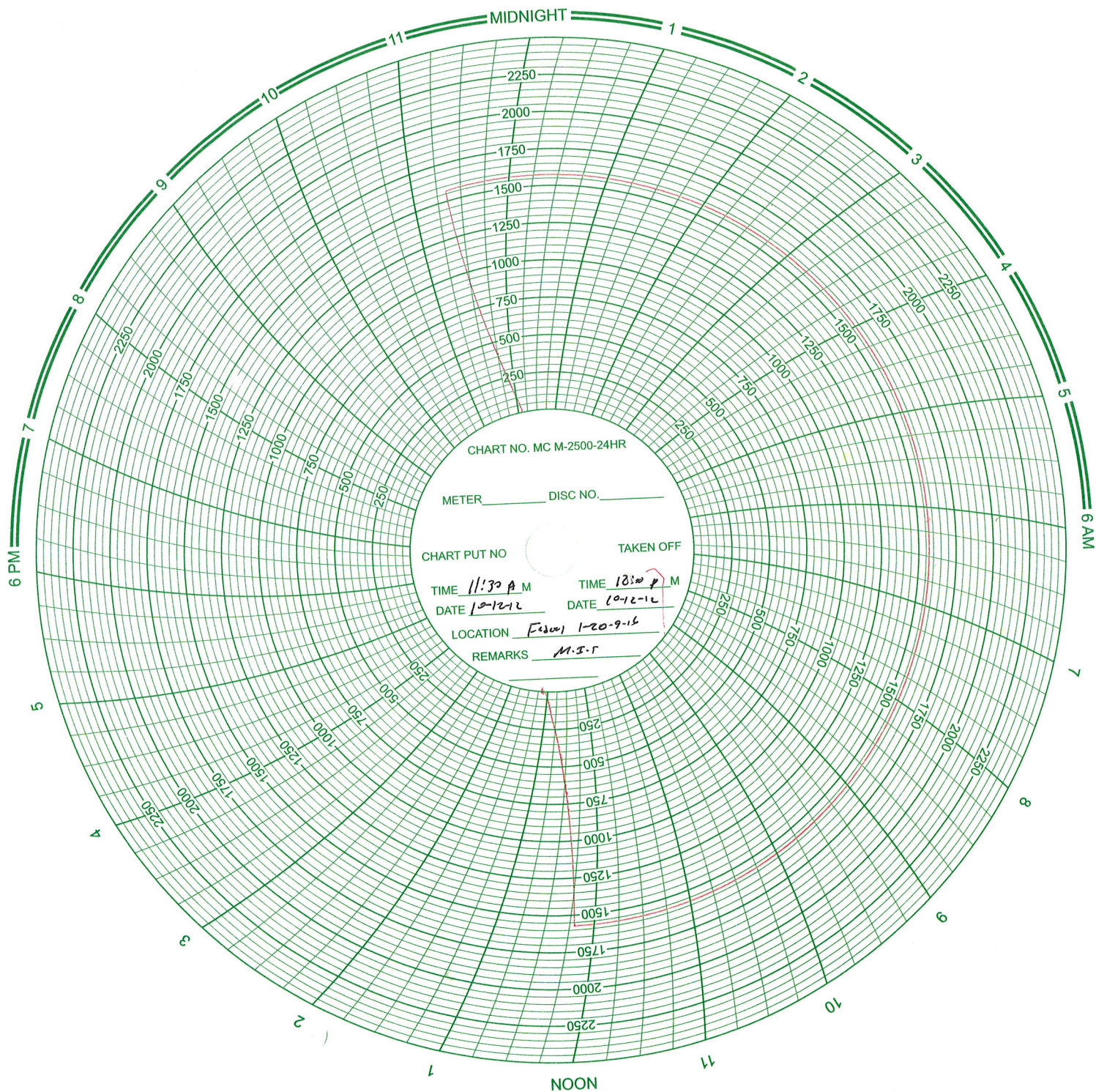
Pass

Fail

Signature of Witness: \_\_\_\_\_

Signature of Person Conducting Test: \_\_\_\_\_

Riley Bugh



## Daily Activity Report

Format For Sundry

FEDERAL 1-20-9-16

8/1/2012 To 12/30/2012

10/4/2012 Day: 1

Conversion

Nabors #1608 on 10/4/2012 - MIRUSU. LD rods. Pressure test tbg. - RU pumping unit. Unseat rod pump. Flush tbg w/ 40 BW @ 250°. - Soft seat rods & fill tbg w/ 12 BW. Pressure tbg to 3000 psi. Pressure was dropping off slow. Pressure tbg to 5000 psi attempting to open hole bigger w/o success. - LD 215- 3/4" rods, ponies & polished rod on trailer. Flush tbg & rods w/ additional 20 BW during TOH. - X-over for tbg equipment. Tie drill line back single line. ND wellhead. TA was not set. NU BOPs. RU rig floor. - Flush tbg w/ 30 BW. Drop standing valve down tbg. Fill tbg & pressure test tbg to 3000 psi (good test). - RU sandline. RIH w/ fishing tool on sandline & retrieve. - MIRUSU. Hot oiler had pumped 60 bbls water down csg @ 250°.

**Daily Cost:** \$0

**Cumulative Cost:** \$8,328

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10/5/2012 Day: 2

Conversion

Nabors #1608 on 10/5/2012 - TOH w/ tbg (talleying, breaking collars & applying Liquid-Oring to threads). LD 48- jts tbg on trailer. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'. - On standby waiting for possible frac schedule change. - On standby waiting for possible frac schedule change. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - SWIFN. RU pump & pump lines. - SWIFN. RU pump & pump lines. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perferators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perferators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - Tools won't test. Move pkr. Still won't test. - Tools won't test. Move pkr. Still won't test. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'.

**Daily Cost:** \$0

**Cumulative Cost:** \$16,122

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10/8/2012 Day: 4

Conversion

Nabors #1608 on 10/8/2012 - Frac D-1 Sands, FB, CO top of RBP and retrieve RBP. POOH. RBIH w/injection string. - Waith for acid truck from Multi-chem. - SWIFN. - Spot in pipe trailer and start LD pipe. LD 95 jts of 2 7/8" N-80 tbg. - Had to wair on semi trailer to LD pipe. Well still flowing after releasing the plug. - Release pkr, RD frac valve, RIH to latch on to RBP. Had to CO 15' of fill. Circ clean and released plug. - Open tbg up to FB on a 20 choke. Died down

to 0 after 20 bbls. - Filled backside w/12 bbls and PU to 500 psi. Frac D-1 sands 4636-39'. RD frac crew, called runners for the tbg trailer. - Spot in frac crew and RU lines. Set pkr @ 4614'. - Safety Meeting, discussed location hazards, recent NFX incidents, job procedure, emergency plans, meeting point. - Move plug down to 4670' and plug up to 4662'. Pressure test plug to 4000 PSI. Good test. - RU Muti-chem and pump 2 Bbls acid. Pump 24 Bbls behind HCL to spot @ 4640'. Move PKR above perms to 4608' and start breaking dwn zones. BD @ 3700 psi. Increased rate to .5 Bbl and pumped 5 bbls @ 1500 psi. shut down and pressurebled down to zero in less then a minute. - Waiting on frac crew.

**Daily Cost:** \$0

**Cumulative Cost:** \$84,384

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**10/9/2012 Day: 5**

**Conversion**

Nabors #1608 on 10/9/2012 - TIH w/ pkr. Test tbg. Set pkr. Test casing. RDMOSU. Well ready for MIT. - Held safety meeting & discussed JSA's. TIH w/ XN nipple, 2-3/8" x 4' pup jt, XO sub (2-7/8" to 2-3/8"), "HD" pkr, On/Off tool, PSN, 133 jts 2-7/8" tbg. - Tighten well head bolts. Test casing to 1400 psi. Took 2 attempts. - Pump 20 bbls fluid. Drop STD vlve. Fill tbg w/ 12 bbls. Test tbg to 3000 psi for 30 min, took 3 attempts. - RDMOSU. Well ready for MIT. - Pump 50 bbls pkr fluid. Set pkr w/ 15,000#'s tension @ 4107' CEO. 4117' EOT. - Single line rig. RD BOP's. Hang tbg in well on 6' pup joint. - RU sand line & fish std valve.

**Daily Cost:** \$0

**Cumulative Cost:** \$113,603

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**10/16/2012 Day: 6**

**Conversion**

Rigless on 10/16/2012 - Conduct initial MIT - On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test. **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$190,137

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**Pertinent Files: Go to File List**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/13/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: <input type="text" value="Put on Injection"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="text-align: center;">           The above reference well was put on injection at 2:30 PM on            11/13/2012.         </div> <div style="text-align: right; margin-top: 20px;"> <b>Accepted by the            Utah Division of            Oil, Gas and Mining            FOR RECORD ONLY            November 19, 2012</b> </div>		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/15/2012	



April 30, 2012

Mr. Mark Reinbold  
State of Utah  
Division of Oil, Gas and Mining  
1594 W North Temple  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Federal #1-20-9-16  
Monument Butte Field, Lease #UTU-52018  
Section 20-Township 9S-Range 16E  
Duchesne County, Utah

Dear Mr. Reinbold:

Newfield Production Company herein requests approval to convert the Federal #1-20-9-16 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact me at (303) 893-0102.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Sundberg". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Eric Sundberg  
Regulatory Lead

**RECEIVED**

**MAY 01 2012**

**DIV OF OIL, GAS, & MINING**

**NEWFIELD PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**FEDERAL #1-20-9-16**  
**MONUMENT BUTTE FIELD (GREEN RIVER) FIELD**  
**LEASE #UTU-52018**  
**APRIL 30, 2012**


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STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR INJECTION WELL - UIC FORM 1

OPERATOR Newfield Production Company  
ADDRESS 1001 17th Street, Suite 2000  
Denver, Colorado 80202

Well Name and number: <u>Federal #1-20-9-16</u>	
Field or Unit name: <u>Monument Butte (Green River)</u>	Lease No. <u>UTU-52018</u>
Well Location: QQ <u>NENE</u> section <u>20</u> township <u>9S</u> range <u>16E</u> county <u>Duchesne</u>	
Is this application for expansion of an existing project? ..... Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Will the proposed well be used for:	
Enhanced Recovery? .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Disposal? .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Storage? .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is this application for a new well to be drilled? ..... Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If this application is for an existing well,	
has a casing test been performed on the well? ..... Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Date of test: _____	
API number: <u>43-013-33066</u>	
Proposed injection interval: from <u>3939</u> to <u>5958</u>	
Proposed maximum injection: rate <u>500 bpd</u> pressure <u>1769</u> psig	
Proposed injection zone contains [x] oil, [ ] gas, and/or [ ] fresh water within 1/2 mile of the well.	
<div style="border: 1px solid black; padding: 5px; text-align: center;">IMPORTANT: Additional information as required by R615-5-2 should accompany this form.</div>	
List of Attachments: <u>Attachments "A" through "H-1"</u>	
I certify that this report is true and complete to the best of my knowledge.	
Name: <u>Eric Sundberg</u>	Signature <u></u>
Title: <u>Regulatory Lead</u>	Date <u>4/30/12</u>
Phone No. <u>(303) 893-0102</u>	
(State use only)	
Application approved by _____	Title _____
Approval Date _____	
Comments:	

# FEDERAL 1-20-9-16

Spud Date: 05/16/07  
Put on Production: 07/25/07  
GL: 6038' KB: 6050'

Initial Production: BOPD,  
MCFD, BWPD

## Proposed Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (312.36')  
DEPTH LANDED: 324.21' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 137 jts. (6015.83')  
DEPTH LANDED: 6029.08' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 60'

### TUBING

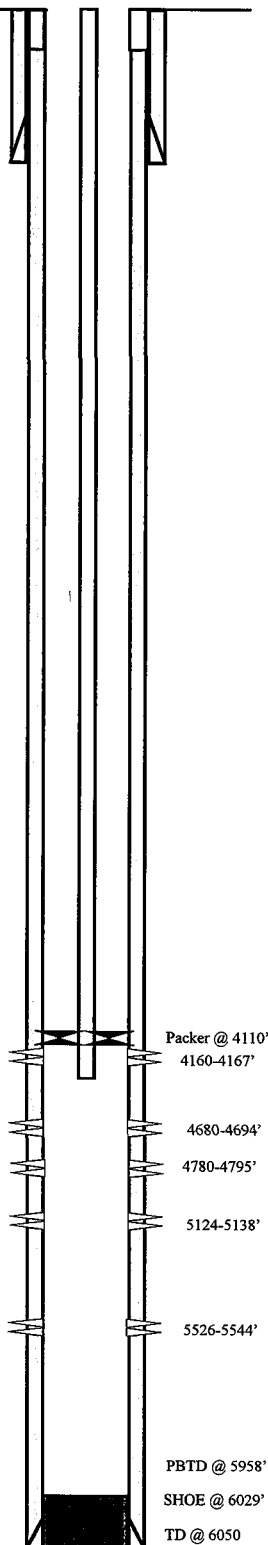
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 179 jts (5506.29')  
TUBING ANCHOR: 5518.29' KB  
NO. OF JOINTS: 1 jts (30.52')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5551.61' KB  
NO. OF JOINTS: 2 jts (61.81')  
TOTAL STRING LENGTH: EOT @ 5614.97' KB

### FRAC JOB

07/19/07	5526-5544'	<b>Frac CP1 sands as follows:</b> 40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.
07/19/07	5124-5138'	<b>Frac LODC sands as follows:</b> 60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.
07/19/07	4780-4795'	<b>Frac C sands as follows:</b> 60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.
07/19/07	4680-4694'	<b>Frac D2 sands as follows:</b> 79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal
07/20/07	4160-4167'	<b>Frac GB6 sands as follows:</b> 25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal
1/26/09		Pump Change. Updated r & t details.

### PERFORATION RECORD

07/10/07	5526-5544'	4 JSPF	72 holes
07/19/07	5124-5138'	4 JSPF	56holes
07/19/07	4780-4795'	4 JSPF	60 holes
07/19/07	4680-4694'	4 JSPF	56 holes
07/19/07	4160-4167'	4 JSPF	28 holes



**NEWFIELD**

**FEDERAL 1-20-9-16**

617°FNL & 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

## **WORK PROCEDURE FOR INJECTION CONVERSION**

1. Rig up hot oil truck to casing. Pump water. Unseat pump. Flush rods. Trip out of hole with rods and pump.
2. Trip out of hole with tubing, breaking and doping every connection. Trip in hole with packer and tubing. Rig up water truck to casing. Pump packer fluid. Set packer.
3. Test casing and packer.
4. Rig down and move out.

**REQUIREMENTS FOR INJECTION OF FLUIDS INTO RESERVOIRS  
RULE R615-5-1**

1. **Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**
2. **A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

**2.1 The name and address of the operator of the project.**

Newfield Production Company  
1001 17<sup>th</sup> Street, Suite 2000  
Denver, Colorado 80202

**2.2 A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile of the project area.**

See Attachment A.

**2.3 A full description of the particular operation for approval is requested.**

Approval is requested to convert the Federal #1-20-9-16 from a producing oil well to a water injection well in Monument Butte (Green River) Field.

**2.4 A description of the pools from which the identified wells are producing or have produced.**

The proposed injection well will inject into the Green River Formation.

**2.5 The names, description and depth of the pool or pools to be affected.**

The injection zone is in the Green River Formation. For the Federal #1-20-9-16 well, the proposed injection zone is from Garden Gulch to Basal Carbonate (3939' - 5958'). The confining strata directly above and below the injection zones are the Garden Gulch and the top of the Wasatch Formation or TD, which ever is shallower. The Garden Gulch Marker top is at 3612' and the TD is at 6050'.

**2.6 A copy of a log of a representative well completed in the pool.**

The referenced log for the Federal #1-20-9-16 is on file with the Utah Division of Oil, Gas and Mining.

- 2.7 A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

- 2.8 A list of all operators and surface owners within one-half mile radius of the proposed project.**

See Attachment B.

- 2.9 An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.**

See Attachment C.

- 2.10 Any additional information the Board may determine is necessary to adequately review the petition.**

Newfield Production Company will supply any additional information requested by the Utah Division of Oil, Gas and Mining.

- 4.0 Establish recovery projects may be expanded and additional wells placed on injection only upon authority from the Board after notice and hearing or by administrative approval.**

This proposed injection well is on a Federal lease (Lease #UTU-52018) in the Monument Butte Federal (Green River) Field, and this request is for administrative approval.

**REQUIREMENTS FOR CLASS II INJECTION WELLS INCLUDING WATER DISPOSAL,  
STORAGE AND ENHANCED RECOVERY WELLS  
SECTION V – RULE R615-5-2**

- 1. Injection well shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.**
- 2. The application for an injection well shall include a properly completed Form DOGM-UIC-1 and the following:**
  - 2.1 A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed wells, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.**

See Attachments A and B.
  - 2.2 Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper and porosity.**

All logs are on file with the Utah Division of Oil, Gas and Mining.
  - 2.3 A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.**

A copy of the cement bond log is on file with the Utah Division of Oil, Gas and Mining.
  - 2.4 Copies of logs already on file with the Division should be referenced, but need not be refilled.**

All copies of logs are on file with the Utah Division of Oil, Gas and Mining.
  - 2.5 A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.**

The casing program is 8-5/8", 24# surface casing run to 324' KB, and 5-1/2", 15.5# casing run from surface to 6029' KB. A casing integrity test will be conducted at the time of conversion. See Attachment E.
  - 2.6 A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.
  - 2.7 Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F.

**The proposed average and maximum injection pressures.**

The proposed average injection pressure will be approximately 1100 psig and the maximum injection pressure will not exceed 1769 psig.

- 2.8 Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.**

The minimum fracture gradient for the Federal #1-20-9-16, for existing perforations (4160' - 5544') calculates at 0.81 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 1769 psig. We may add additional perforations between 3612' and 6050'. See Attachments G and G-1.

- 2.9 Appropriate geological data on the injection interval and confining beds, including the geologic name, lithologic description, thickness, depth, and lateral extent.**

In the Federal #1-20-9-16, the proposed injection zone (3939' - 5958') is in the Garden Gulch to the Basal Carbonate of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The members are composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31' and is confined to the Monument Butte Federal Field. Outside the Monument Butte Federal Field, the sandstone is composed of tight, very fine, silty, calcareous sandstone, less than 3' thick. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

- 2.10 A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter the improper intervals.**

See Attachments E through E-11.

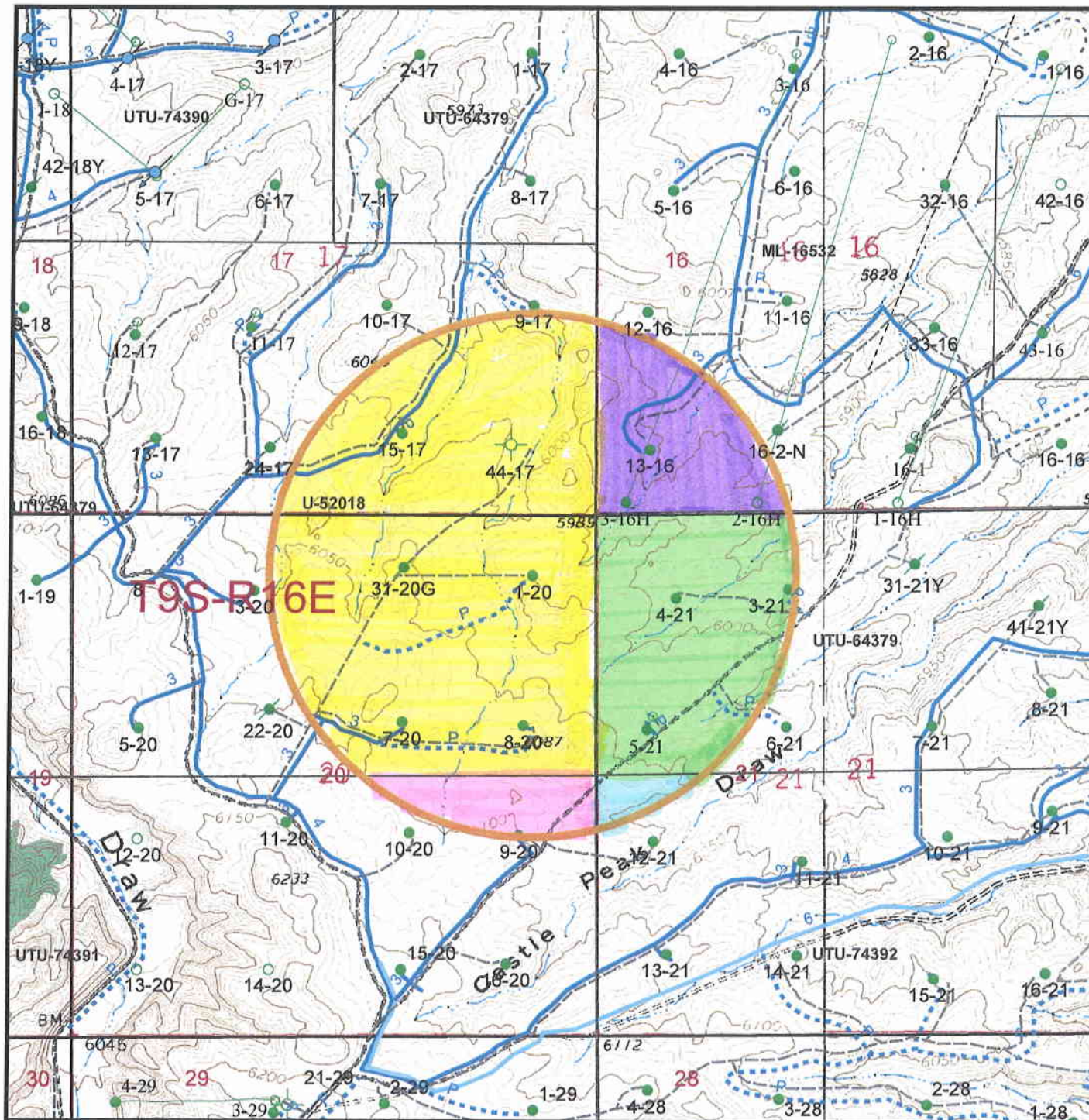
Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure relief.

- 2.11 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.**

See Attachment C.

- 2.12 Any other information that the Board or Division may determine is necessary to adequately review the application.**

Newfield Production Company will supply any requested information to the Board or Division.



- WellStatus\_HalfMile\_Buffer**
- Well Status**
- Location
  - CTI
  - Surface Spud
  - Drilling
  - Waiting on Completion
  - Producing Oil Well
  - Producing Gas Well
  - Water Injection Well
  - Dry Hole
  - Temporarily Abandoned
  - Plugged & Abandoned
  - Shut In
- Injection system**
- high pressure
  - low pressure
  - proposed
  - return
  - return proposed
- Leases**
- Mining tracts**

UTU-52018

UTU-74391

UTU-74392

ML-16532

UTU-64379

Federal 1-20  
Section 20, T9S-R16E

**NEWFIELD**

ROCKY MOUNTAINS 1 in = 1,500 feet

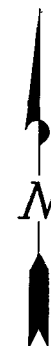
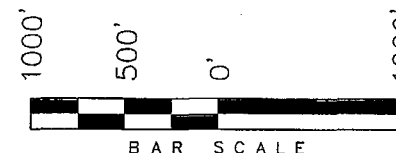
**1/2 Mile Radius Map**  
Duchesne & Uintah Counties

1001 17th Street Suite 2000  
Denver, Colorado 80202  
Phone: (303) 693-0102

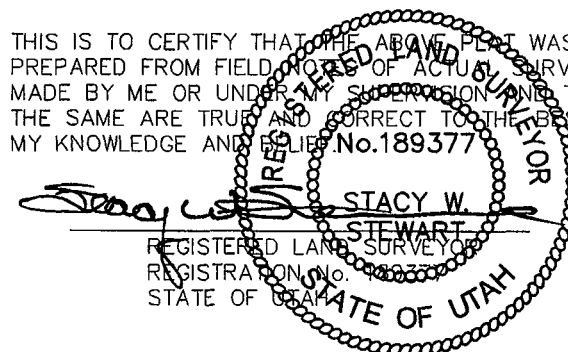
March 13, 2012

**T9S, R16E, S.L.B.&M.****NEWFIELD PRODUCTION COMPANY**

WELL LOCATION, 9 MILE 1-20-9-16,  
LOCATED AS SHOWN IN THE NE 1/4 NE  
1/4 OF SECTION 20, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.

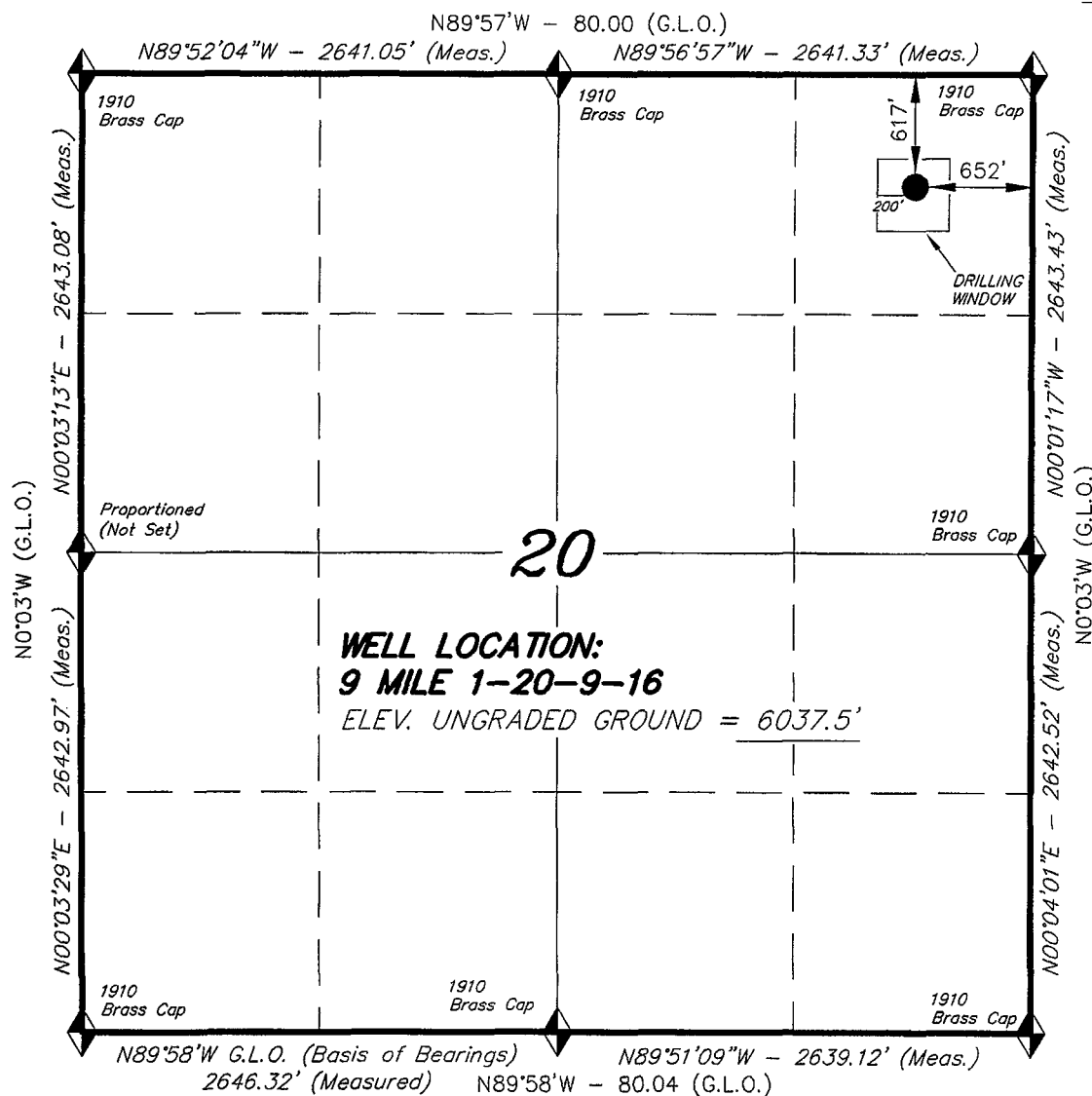


THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 12-31-05	SURVEYED BY: C.M.
DATE DRAWN: 01-04-06	DRAWN BY: L.C.S.
REVISED:	SCALE: 1" = 1000'



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SW)

**9 MILE 1-20-9-16**  
(Surface Location) NAD 83  
LATITUDE = 40° 01' 18.99"  
LONGITUDE = 110° 08' 09.95"

**EXHIBIT B**

#	Legal Description	Lessor & Expiration	Lessee & Operating Rights	Surface Owner
1	T9S-R16E SLM Section 17: S2 Section 20: N2	USA UTU-52018 HBP	Newfield Production Company Newfield RMI LLC	USA
2	T9S-R16E SLM Section 19: E2SW, SE, LOTS 3, 4 Section 20: S2 Section 29: All Section 30: All	USA UTU-74391 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	
3	T9S-R16E SLM Section 21: S2 Section 22: NENE, S2 Section 23: SWSW Section 24: SESE Section 26: NENE Section 27: All Section 28: All	USA UTU-74392 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	USA
4	T9S-R16E SLM Section 16: All	State of Utah ML- 16532 HBP	Newfield RMI LLC QEP Energy Company El Paso E&P Company LP American Petroleum Corp Brave River Production Trans Republic Resources Inc	STATE of UTAH
5	T9S-R16E SLM Section 8: SWNE, SE Section 9: SWSW Section 17: NE	USA UTU-64379 HBP	Newfield Production Company Newfield RMI LLC Yates Petroleum Corp	USA

Section 18: E2SW, SE, LOTS 3,4

Section 19: NE, E2NW, LOTS 1,2

Section 21: N2


Section 22: W2NE, SENE, NW

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well  
Federal #1-20-9-16

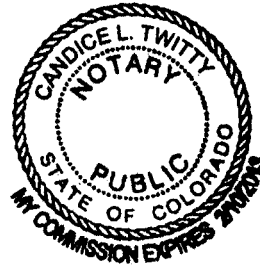
I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed:   
Newfield Production Company  
Eric Sundberg  
Regulatory Lead

Sworn to and subscribed before me this 30<sup>th</sup> day of April, 2012.

Notary Public in and for the State of Colorado: Candice L. Twitty

My Commission Expires  
02/10/2013



## FEDERAL 1-20-9-16

Spud Date: 05/16/07  
 Put on Production: 07/25/07  
 GL: 6038' KB: 6050'

## Wellbore Diagram

Initial Production: BOPD,  
 MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (312.36')  
 DEPTH LANDED: 324.21' KB  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

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 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
 CEMENT TOP: 60'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 179 jts (5506.29')  
 TUBING ANCHOR: 5518.29' KB  
 NO. OF JOINTS: 1 jts (30.52')  
 SEATING NIPPLE: 2-7/8" (1.10')  
 SN LANDED AT: 5551.61' KB  
 NO. OF JOINTS: 2 jts (61.81')  
 TOTAL STRING LENGTH: EOT @ 5614.97' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM polished rods  
 SUCKER RODS: 1-2', 4', 6' & 8' x 3/4" pony rods, 100-3/4" guided rods, 95-3/4" slick rods, 20-3/4" guided rods, 6-1 1/2" x 25' weight rods.  
 PUMP SIZE: CDI 2-1/2" x 1-1/2" x 16' x 20' RHAC  
 STROKE LENGTH: 120"  
 PUMP SPEED, 5 SPM:

FRAC JOB

07/19/07 5526-5544' **Frac CP1 sands as follows:**  
 40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.

07/19/07 5124-5138' **Frac LODC sands as follows:**  
 60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.

07/19/07 4780-4795' **Frac C sands as follows:**  
 60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.

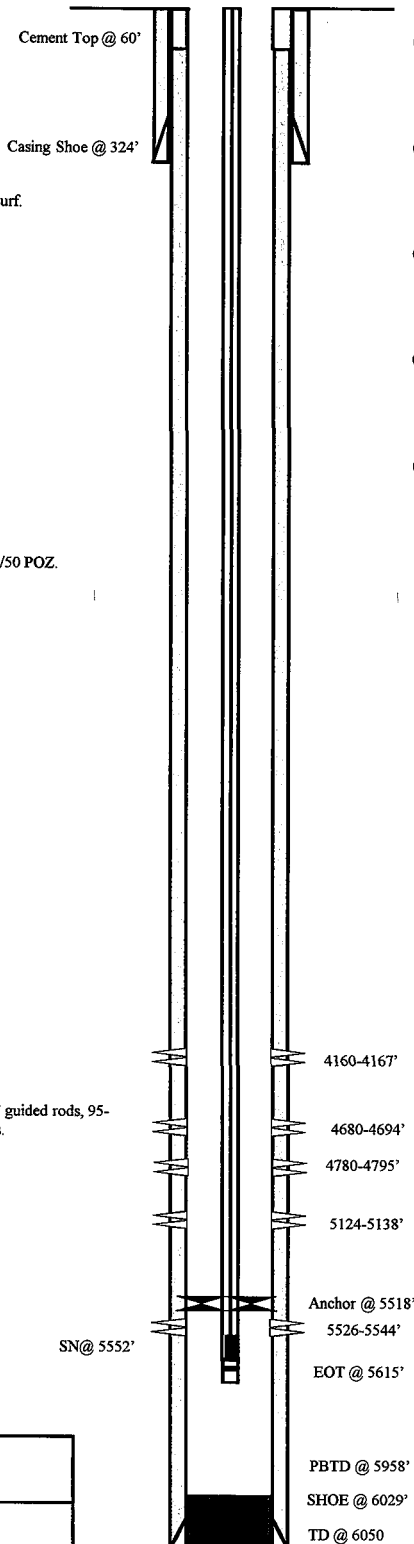
07/19/07 4680-4694' **Frac D2 sands as follows:**  
 79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal.

07/20/07 4160-4167' **Frac GB6 sands as follows:**  
 25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal.

1/26/09 Pump Change. Updated r & t details.

PERFORATION RECORD

07/10/07 5526-5544' 4 JSPF 72 holes  
 07/19/07 5124-5138' 4 JSPF 56holes  
 07/19/07 4780-4795' 4 JSPF 60 holes  
 07/19/07 4680-4694' 4 JSPF 56 holes  
 07/19/07 4160-4167' 4 JSPF 28 holes



NEWFIELD

FEDERAL 1-20-9-16

617'FNL &amp; 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

## Federal 9-17-9-16

Spud Date: 9-11-06  
Put on Production: 11-01-06  
GL: 5953' KB: 5965'

Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts (310.22')  
DEPTH LANDED: 322.07' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 139 jts. (6032.96')  
DEPTH LANDED: 6044.21' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP AT: 30'

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 175 jts (5485.5')  
TUBING ANCHOR: 5485.5' KB  
NO. OF JOINTS: 2 jts (63.0')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5551.2' KB  
NO. OF JOINTS: 2 jts (63.1')  
TOTAL STRING LENGTH: EOT @ 5616' KB

**SUCKER RODS**

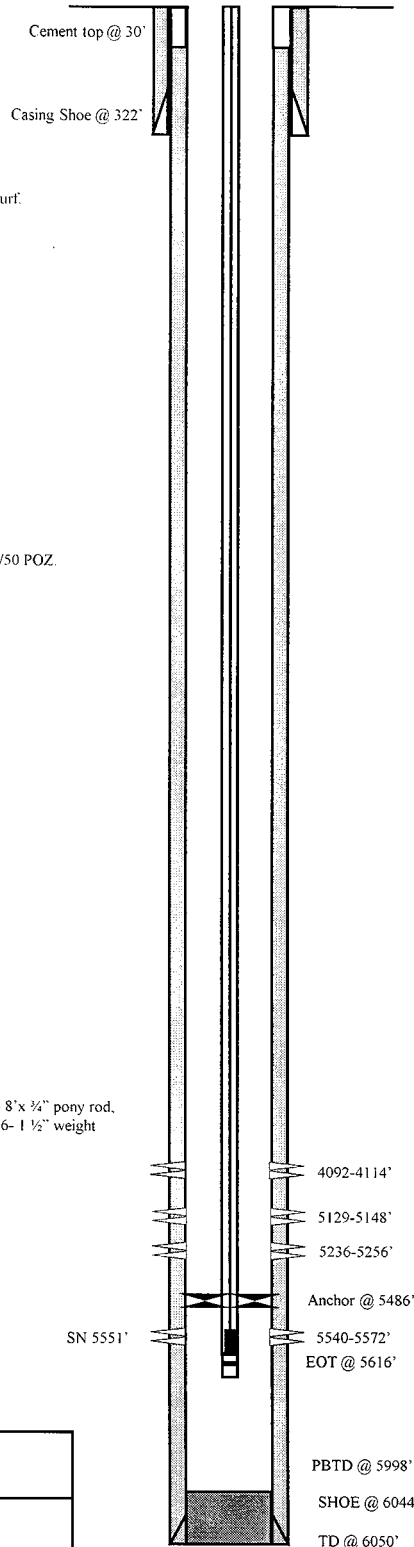
POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1- 2' x 3/4" pony rod, 1- 6' x 3/4" pony rod, 1- 8' x 3/4" pony rod,  
99- 3/4" guided rods, 86- 3/4" guided rods, 30- 3/4" guided rods, 6- 1 1/2" weight  
bars  
PUMP SIZE: 2-1/2" x 1-1/2" x 12' x 16' RHAC pump  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 5 SPM

**FRAC JOB**

10-27-06	5540-5572'	<b>Frac CP1 sands as follows:</b> 89695# 20/40 sand in 672 bbls Lightning 17 frac fluid. Treated @ avg press of 1635 psi w/avg rate of 24.9 BPM. ISIP 2000 psi. Calc flush: 5040 gal. Actual flush: 5538 gal.
10-27-06	5236-5256'	<b>Frac LODC sands as follows:</b> 80345# 20/40 sand in 604 bbls Lightning 17 frac fluid. Treated @ avg press of 2685 psi w/avg rate of 27.3 BPM. ISIP 2560 psi. Calc flush: 4746 gal. Actual flush: 5234 gal.
10-27-06	5129-5148'	<b>Frac A 3 sands as follows:</b> 80324# 20/40 sand in 597 bbls Lightning 17 frac fluid. Treated @ avg press of 2175 psi w/avg rate of 24.7 BPM. ISIP 2240 psi. Calc flush: 4923 gal. Actual flush: 4410 gal.
10-27-06	4092-4114'	<b>Frac GB4 sands as follows:</b> 38251# 20/40 sand in 358 bbls Lightning 17 frac fluid. Treated @ avg press of 1410 w/ avg rate of 14.3 BPM. ISIP 1490 psi. Calc flush: 4485 gal. Actual flush: 4410 gal.
2/23/07		<b>Pump Change.</b> Rod & Tubing detail updated.
05/27/08		updated rod and tubing detail
11/23/09		Pump change. Updated rod and tubing detail.

**PERFORATION RECORD**

10-17-06	5540-5572'	4 JSPF	128 holes
10-27-06	5236-5256'	4 JSPF	80 holes
10-27-06	5129-5148'	4 JSPF	76 holes
10-27-06	4092-4114'	4 JSPF	88 holes

**Federal 9-17-9-16**

2108' FSL &amp; 636' FEL

NE/SE Section 17-T9S-R16E

Duchesne Co, Utah

API # 43-013-33032; Lease # UTU-52018

## Federal 15-17-9-16

Spud Date: 08/18/06  
Put on Production: 10/13/06  
K.B.: 6000, G.L5988

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (310.18')  
DEPTH LANDED: 322.03' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 136 jts. (5986.81')  
DEPTH LANDED: 6000.06' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP: 60'

TUBING

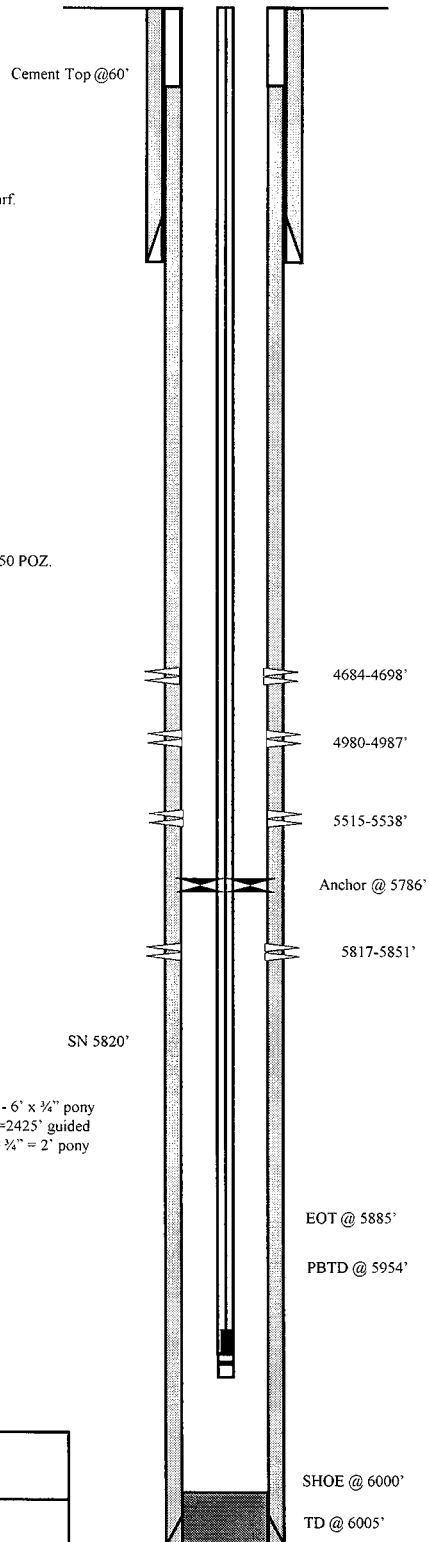
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 183 jts (5785.5')  
TUBING ANCHOR: 5785.5' KB  
NO. OF JOINTS: 1 jts (31.7')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5820.1' KB  
NO. OF JOINTS: 2 jts (63.4')  
TOTAL STRING LENGTH: EOT @ 5885' KB

SUCKER RODS


POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1-2' x 3/4" pony rods, 1-4' x 3/4" pony rod, 1-6' x 3/4" pony rod, 1-8' x 3/4" pony rod, 98- 3/4" = 2450' guided rods, 97- 3/4" = 2425' guided rods, 30- 3/4" = 750' guided rods, 6- 1 1/4" = 150' weight bars, 1 - 3/4" = 2' pony rod.  
PUMP SIZE: 2-1/2" x 1-1/2" x 17'  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 4.5

FRAC JOB

10/10/06	5817-5851'	<b>Frac CP5 sands as follows:</b> 89648# 20/40 sand in 681 bbls Lightning 17 frac fluid. Treated @ avg press of 1910 psi w/avg rate 25.3 BPM. ISIP 2250 psi. Calc flush: 5849 gal. Actual flush: 5309 gal.
10/10/06	5515-5538'	<b>Frac CP1 sands as follows:</b> 60364# 20/40 sand in 493 bbls Lightning 17 frac fluid. Treated @ avg press of 1727 psi w/avg rate of 25.1 BPM. ISIP 2120 psi. Calc flush: 5536 gal. Actual flush: 4998 gal.
10/11/06	4980-4987'	<b>Frac A.5 sands as follows:</b> 29934# 20/40 sand 393 bbls Lightning 17 frac fluid. Treated @ avg press of 2320 psi w/avg rate of 25 BPM. ISIP 2500 psi. Calc flush: 4985 gal. Actual flush: 4473 gal.
10/11/06	4684-4698'	<b>Frac D3 sands as follows:</b> 87753# 20/40 sand in 610 bbls Lightning 17 frac fluid. Treated @ avg press of 1960 psi w/avg rate of 25 BPM. ISIP 2250 psi. Calc flush: 4696 gal. Actual flush: 4578 gal.
11/30/06	Pump Change	Rod & Tubing Detail updated.
05/02/08	Stuck Pump	Tubing detail updated.
3/19/10		Pump change. Updated rod and tubing detail.
11/24/2011		<b>Pump Change.</b> Updated rod & tubing detail.

PERFORATION RECORD

10/05/06	5817-5851'	2 JSPF	68 holes
10/10/06	5515-5538'	4 JSPF	92 holes
10/11/06	4980-4987'	4 JSPF	28 holes
10/11/06	4684-4698'	4 JSPF	56 holes


<b>Federal 15-17-9-16</b> 810' FSL & 1961' FEL SW/SE Section 17-T9S-R16E Duchesne Co, Utah API #43-013-33037; Lease #UTU-52018

## Federal 7-20-9-16

Spud Date: 6-6-07

Put on Production: 8-12-05

GL: 6078' KB: 6090'

Injection Wellbore  
DiagramSURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jnts (306 9')

DEPTH LANDED: 318.75' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 1343 jts (5918 61')

DEPTH LANDED: 5931 86' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed &amp; 425 sxs 50/50 POZ

CEMENT TOP AT: 48'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

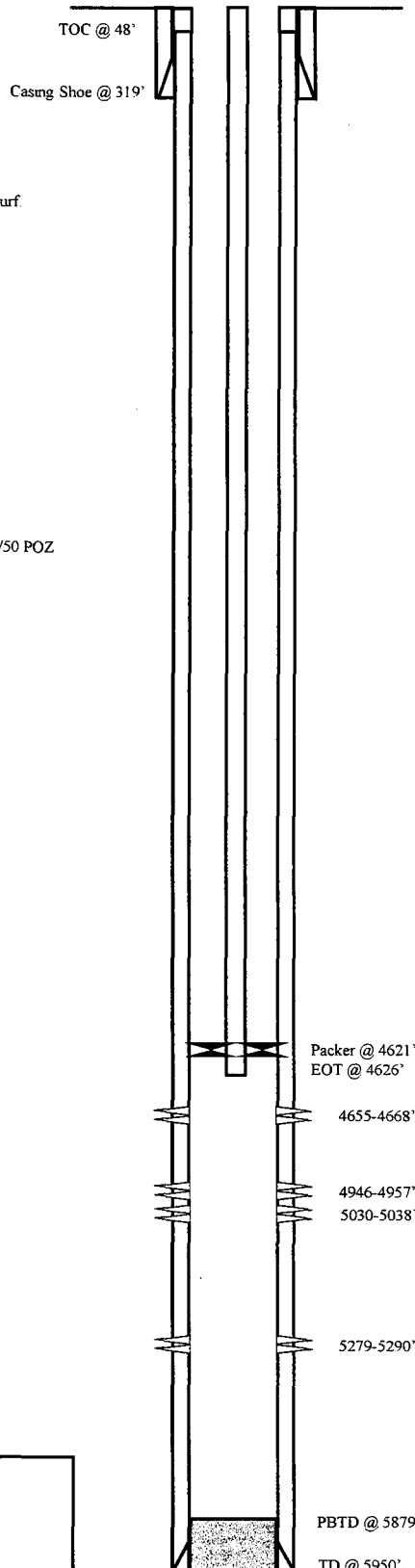
NO. OF JOINTS: 146 jts (4605')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4617' KB

ARROW #1 PKR CE @ 4621.42'

TOTAL STRING LENGTH: EOT @ 4626'

FRAC JOB

7-9-07 5279-5290'

**Frac LODC, sands as follows:**

29,554# 20/40 sand in 370 bbls Lightning 17 frac fluid. Treated @ avg press of 1987 psi w/avg rate of 24.7 BPM. ISIP 2284 psi. Calc flush: 5277 gal. Actual flush: 4746 gal.

7-9-07 5030-5038'

**Frac LODC sands as follows:**

24,274# 20/40 sand in 368 bbls Lightning 17 frac fluid. Treated @ avg press of 2044 psi w/avg rate of 24.7 BPM. ISIP 2143 psi. Calc flush: 5028 gal. Actual flush: 4557 gal.

7-9-07 4946-4957'

**Frac A3 sands as follows:**

40,017# 20/40 sand in 427 bbls Lightning 17 frac fluid. Treated @ avg press of 1862 psi w/avg rate of 24.7 BPM. ISIP 2238 psi. Calc flush: 4944 gal. Actual flush: 4389 gal.

7-9-07 4655-4668'

**Frac D3 sands as follows:**

48,763# 20/40 sand in 450 bbls Lightning 17 frac fluid. 24.8 BPM. Calc flush: 4653 gal. Actual flush: 4578 gal.

6/9/09

**Stuck Pump:** Updated rod & tubing details.

5/26/11

**Pump Change:** Updated rod and tubing detail

01/30/12

**Parted rods:** Updated rod and tubing detail

3/12/12

**Pump change:** Updated rod & tubing detail

5/9/12

**Convert to Injection Well**

5/11/12

**Conversion MIT Finalized** - update tbg detailPERFORATION RECORD

7-3-07	5279-5290'	4 JSPF	44 holes
7-9-07	5030-5038'	4 JSPF	32 holes
7-9-07	4946-4957'	4 JSPF	44 holes
7-9-07	4655-4668'	4 JSPF	52 holes

**NEWFIELD****Federal 7-20-9-16**

2098' FNL &amp; 1961' FEL

SW/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33106; Lease #UTU-52018

## FEDERAL 8-20-9-16

Spud Date: 06/05/07  
Put on Production: 07/09/07  
GL: 6055' KB: 6067'

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (303.80')  
DEPTH LANDED: 313.8' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 4 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 134 jts. (5936.00')  
DEPTH LANDED: 5934.00' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 210'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 174 jts. (5422.3')  
TUBING ANCHOR: 5434.3' KB  
NO. OF JOINTS: 1 jt. (31.7')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5468.7' KB  
NO. OF JOINTS: 2 jts. (62.7')  
TOTAL STRING LENGTH: EOT @ 5533' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM polished rods  
SUCKER RODS: 100- 3/4" guided rods, 58- 3/4" sucker rods, 54- 3/4" guided rods,  
6- 1 1/2" weight bars  
PUMP SIZE: CDI 2-1/2" x 1-1/2" x 12' x 16' RHAC  
STROKE LENGTH:  
PUMP SPEED, SPM:

FRAC JOB

07/02/07 5484-5492' **Frac CP1 sands as follows:**  
15470# 20/40 sand in 274 bbls Lightning 17  
frac fluid. Treated @ avg press of 2490 psi  
w/avg rate of 24.6 BPM. ISIP 2369 psi. Calc  
flush: 5482 gal. Actual flush: 4981 gal.

07/02/07 5270-5280' **Frac LODC sands as follows:**  
29548# 20/40 sand in 365 bbls Lightning 17  
frac fluid. Treated @ avg press of 2397 psi  
w/avg rate of 24.4 BPM. ISIP 2486 psi. Calc  
flush: 5268 gal. Actual flush: 4796 gal.

07/02/07 5129-5176' **Frac LODC sands as follows:**  
4712# 20/40 sand in 389 bbls Lightning 17  
frac fluid. Blender Broke. Need to Refrac.  
ISIP 2340 psi. Calc flush: 5127 gal. Actual  
flush: 5292 gal.

07/03/07 5129-5176' **Frac LODC sands as follows:**  
95147# 20/40 sand in 706 bbls Lightning 17  
frac fluid. Treated @ avg press of 2554 psi  
w/avg rate of 24 BPM. ISIP 2775 psi. Calc  
flush: 5127 gal. Actual flush: 4662 gal.

07/03/07 5055-5074' **Frac LODC sands as follows:**  
71220# 20/40 sand in 719 bbls Lightning 17  
frac fluid. Treated @ avg press of 2372 psi  
w/avg rate of 24.3 BPM. ISIP 2680 psi. Calc  
flush: 5053 gal. Actual flush: 5095 gal.

07/03/07 4963-4971' **Frac A1 sands as follows:**  
40277# 20/40 sand in 492 bbls Lightning 17  
frac fluid. Treated @ avg press of 2725 psi  
w/avg rate of 24.5 BPM. ISIP 2290 psi. Calc  
flush: 4961 gal. Actual flush: 4452 gal.

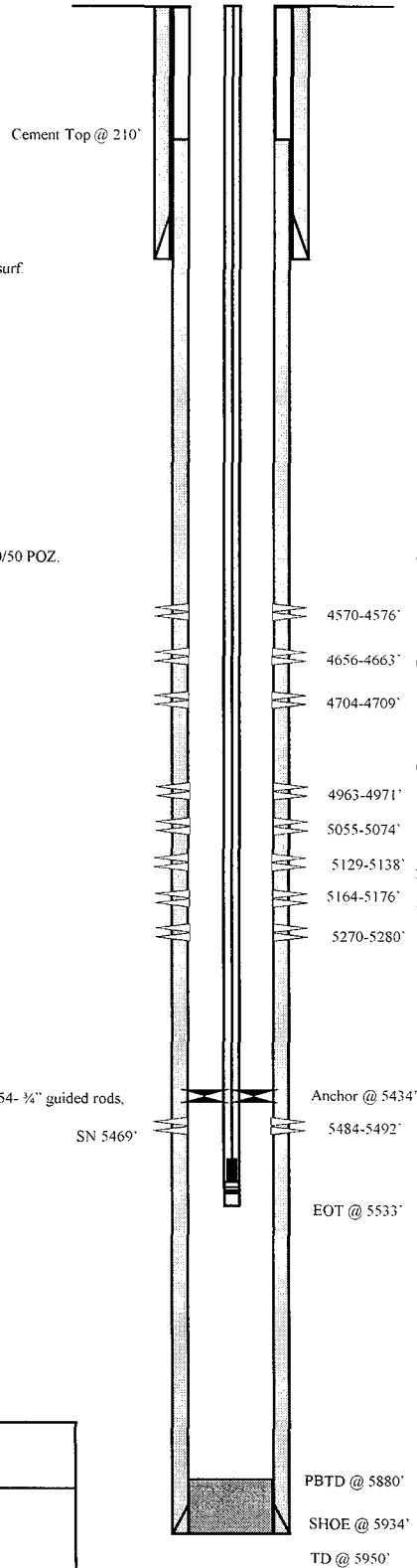
07/05/07 4656-4709' **Frac D3&C sands as follows:**  
29723# 20/40 sand in 376 bbls Lightning 17  
frac fluid. Treated @ avg press of 1630 psi  
w/avg rate of 24.5 BPM. ISIP 1700 psi. Calc  
flush: 4654 gal. Actual flush: 4200 gal.

07/05/07 4570-4576' **Frac D1 sands as follows:**  
42080# 20/40 sand in 356 bbls Lightning 17  
frac fluid. Treated @ avg press of 1829 psi  
w/avg rate of 24.4 BPM. ISIP 1875 psi. Calc  
flush: 4568 gal. Actual flush: 4494 gal.

2/10/09  
5/26/2010  
Pump Change. Updated r & t details.  
Tubing leak. Updated rod and tubing detail.

PERFORATION RECORD

06/28/07 5484-5492' 4 JSPF 32 holes  
07/02/07 5270-5280' 4 JSPF 40 holes  
07/02/07 5164-5176' 4 JSPF 48 holes  
07/02/07 5129-5138' 4 JSPF 36 holes  
07/03/07 5055-5074' 4 JSPF 76 holes  
07/03/07 4963-4971' 4 JSPF 32 holes  
07/03/07 4704-4709' 4 JSPF 20 holes  
07/03/07 4656-4663' 4 JSPF 28 holes  
07/05/07 4570-4576' 4 JSPF 24 holes



NEWFIELD

FEDERAL 8-20-9-16

2133'FNL &amp; 746' FEL

SE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33107; Lease # UTU-52018

# Federal 9-20-9-16

Attachment E-5

Spud Date: 6-14-07

Put on Production: 8-23-07

GL: 6095' KB: 6107'

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

### SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (302.22')

DEPTH LANDED: 313.12' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 8 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 156 jts. (6053.98')

DEPTH LANDED: 6067.23' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.

CEMENT TOP AT: 88'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 165 jts (5188.5')

TUBING ANCHOR: 5200.5' KB

NO. OF JOINTS: 2 jts (62.9')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5266.3' KB

NO. OF JOINTS: 2 jts (62.9')

TOTAL STRING LENGTH: EOT @ 5331.0' KB

### SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM

SUCKER RODS: 1-6' x 3/4" pony rod, 1-4' x 3/4" pony rod, 100-3/4" guided rods, 82-3/4" sucker rods, 22-3/4" guided rods, 6-1 1/2" weight bars

PUMP SIZE: 2-1/2" x 1-1/2" x 18" RHAC

STROKE LENGTH: 120"

PUMP SPEED, SPM: 5 SPM

### FRAC JOB

08-17-07 5248-5254'

**Frac LODC sands as follows:**

14994# 20/40 sand in 282 bbls Lightning 17 frac fluid. Treated @ avg press of 2477 psi w/avg rate of 24.8 BPM. ISIP 2540 psi. Calc flush: 5246 gal. Actual flush: 4704 gal.

08-17 5000-5028'

**Frac LODC sands as follows:**

151355# 20/40 sand in 1050 bbls Lightning 17 frac fluid. Treated @ avg press of 1647 psi w/avg rate of 24.8 BPM. ISIP 2100 psi. Calc flush: 4998 gal. Actual flush: 4494 gal.

08-17-07 4764-4774'

**Frac B.5 sands as follows:**

19761# 20/40 sand in 294 bbls Lightning 17 frac fluid. Treated @ avg press of 2232 psi w/avg rate of 24.8 BPM. ISIP 4148 psi. Calc flush: 4762 gal. Actual flush: 3839 gal.

08-17-07 4602-4611'

**Frac D2 sand as follows:**

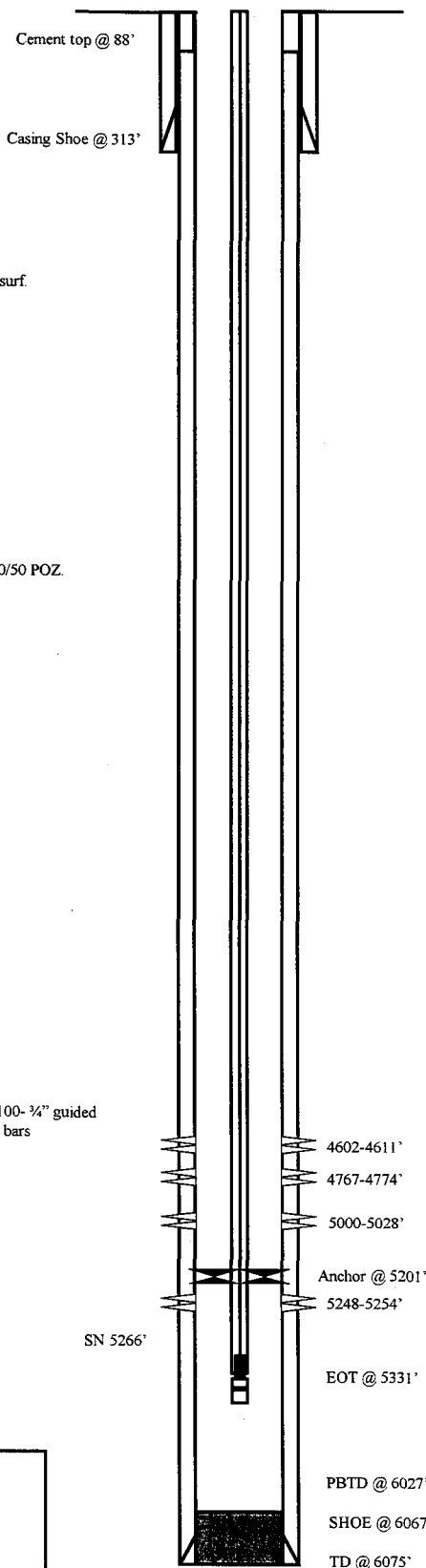
45991# 20/40 sand in 435 bbls Lightning 17 frac fluid. Treated @ avg press of 2094 w/ avg rate of 24.8 BPM. ISIP 1850 psi. Calc flush: 4600 gal. Actual flush: 4515 gal.

2/1/2010

Pump change. Updated rod and tubing detail.

### PERFORATION RECORD

08-13-07	5248-5254'	4 JSPF	24 holes
08-17-07	5000-5028'	4 JSPF	112 holes
08-17-07	4767-4774'	4 JSPF	28 holes
08-17-07	4602-4611'	4 JSPF	36 holes



**NEWFIELD**



**Federal 9-20-9-16**

2011' FSL & 789' FEL (NE/SE)

Section 20, T9S, R16E

Duchesne County, Utah

API #43-013-33068; Lease # UTU-74391

## Federal 3-21-9-16

Spud Date: 10-24-06  
Put on Production: 12-7-06

GL: 5975' KB: 5987'

**SURFACE CASING**

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (310.86')

DEPTH LANDED: 322.71' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 2 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 134 jts (5839.32')

DEPTH LANDED: 5852.57' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ

CEMENT TOP AT: 90'

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 170 jts (5464.16')

TUBING ANCHOR: 5476.16' KB

NO. OF JOINTS: 1 jts (31.59')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5510.55' KB

NO. OF JOINTS: 1 jts (33.42')

NO. OF JOINTS: 3 jts (95.00')

TOTAL STRING LENGTH: EOT @ 5646.27' KB

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM

SUCKER RODS: 1-8", & 1-4 x 1/4" pony rods, 99- 3/4" scraped rods, 95- 3/4" plain rods, 40- 3/4" scraped rods, 6-1 1/2" weight rods.

PUMP SIZE: 2-1/2" x 1-1/2" x 14' RHAC w/SM plunger

STROKE LENGTH: 86"

PUMP SPEED, SPM: 5 SPM

**Wellbore Diagram**

Cement top @ 90'

SN 5511'

Anchor @ 5476'

5500-5523'

EOT @ 5646'

5742-5755'

PBTD @ 5806'

SHOE @ 5852'

TD @ 5965'

Initial Production: BOPD,  
MCFD, BWPD

**FRAC JOB**

11-30-06	5742-5755'	<b>Frac CP4 sands as follows:</b> 29540# 20/40 sand in 399 bbls Lightning 17 frac fluid. Treated @ avg press of 2075 psi w/avg rate of 24.9 BPM. ISIP 2100 psi. Calc flush: 5740 gal. Actual flush: 5233 gal.
12-01-06	5500-5523'	<b>Frac CP1 sands as follows:</b> 89095# 20/40 sand in 713 bbls Lightning 17 frac fluid. Treated @ avg press of 1762 psi w/avg rate of 24.8 BPM. ISIP 1830 psi. Calc flush: 5498 gal. Actual flush: 4994 gal.
12-01-06	5194-5232'	<b>Frac LODC sands as follows:</b> 126238# 20/40 sand in 886 bbls Lightning 17 frac fluid. Treated @ avg press of 2565 psi w/avg rate of 24.7 BPM. ISIP 2450 psi. Calc flush: 5192 gal. Actual flush: 4675 gal.
12-01-06	4984-5002'	<b>Frac A1 sands as follows:</b> 18951# 20/40 sand in 288 bbls Lightning 17 frac fluid. Treated @ avg press of 2110 w/ avg rate of 24.9 BPM. ISIP 2130 psi. Calc flush: 4982 gal. Actual flush: 4519 gal.
12-01-06	4876-4881'	<b>Frac B2 sands as follows:</b> 12667# 20/40 sand in 262 bbls Lightning 17 frac fluid. Treated @ avg press of 2135 w/ avg rate of 25.0 BPM. ISIP 1710 psi. Calc flush: 4874 gal. Actual flush: 4788 gal.
03/10/07		Pump Change. Update rod and tubing details.
12/19/08		Tubing Leak. Updated rod & tubing details.
09/08/08		Parted Rods. Updated rod & tubing details.

**PERFORATION RECORD**

11-27-06	5742-5755'	4 JSPF	52 holes
11-30-06	5500-5523'	4 JSPF	92 holes
12-01-06	5212-5232'	4 JSPF	80 holes
12-01-06	5194-5205'	4 JSPF	44 holes
12-01-06	4984-5002'	4 JSPF	72 holes
12-01-06	4876-4881'	4 JSPF	20 holes

**NEWFIELD**

**Federal 3-21-9-16**

774' FNL & 1909' FWL

NE/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33019; Lease # UTU-64379

## Federal 4-21-9-16

Spud Date: 10-25-06  
Put on Production: 12-12-06  
GL: 5991' KB: 6003'

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts (310.54')  
DEPTH LANDED: 322.39' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 135 jts (5924.58')  
DEPTH LANDED: 5937.83' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 452 sxs 50/50 POZ.  
CEMENT TOP AT: 110'

**TUBING**

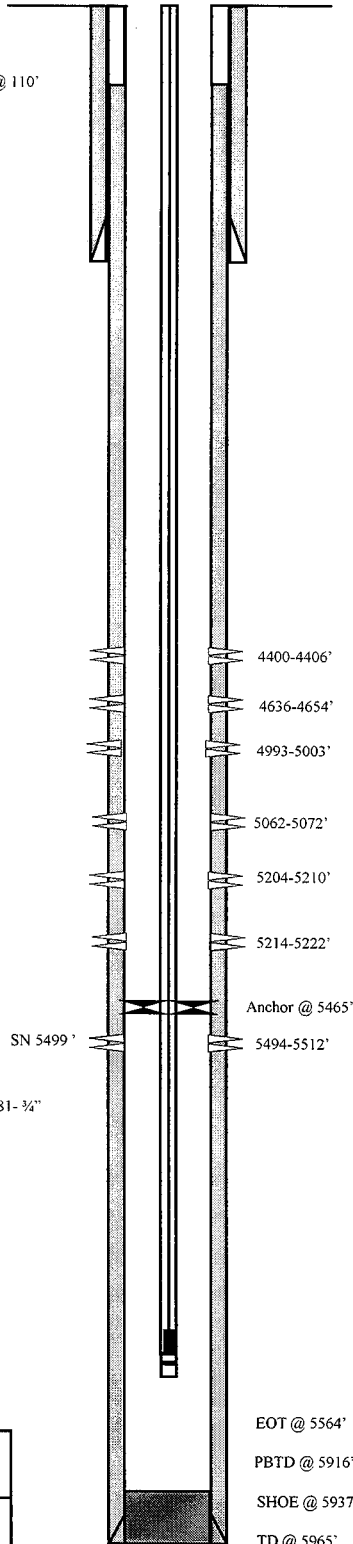
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 173 jts (5453.00')  
TUBING ANCHOR: 5465.00' KB  
NO. OF JOINTS: 1 jts (31.52')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5499.32' KB  
NO. OF JOINTS: 2 jts (63.04')  
TOTAL STRING LENGTH: EOT @ 5563.91' KB

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1-2', 4', 6', 8' x 3/4" pony rods, 99- 3/4" guided rods, 81- 3/4" plain rods, 32- 3/4" guided rods, 6- 1 1/2" weight rods.  
PUMP SIZE: 2-1/2" x 1-1/2" x 10' x 14' RHAC w/SM plunger  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 5 SPM

## Wellbore Diagram

Cement top @ 110'



Initial Production: BOPD,  
MCFD, BWPD

**FRAC JOB**

12-04-06 5494-5512' **Frac CPI sands as follows:**  
5213# 20/40 sand in 385 bbls Lightning 17 frac fluid. Treated @ avg press of 2157 psi w/avg rate of 25 BPM. ISIP 2550 psi. Calc flush: 5492 gal. Actual flush: 10458 gal.

12-04-06 5204-5222' **Frac LODC sands as follows:**  
23667# 20/40 sand in 320 bbls Lightning 17 frac fluid. Treated @ avg press of 2620 psi w/avg rate of 25 BPM. ISIP 2850 psi. Calc flush: 5202 gal. Actual flush: 4704 gal.

12-05-06 4993-5072' **Frac A3, A1 sands as follows:**  
117759# 20/40 sand in 829 bbls Lightning 17 frac fluid. Treated @ avg press of 2350 psi w/avg rate of 25 BPM. ISIP 2200 psi. Calc flush: 4991 gal. Actual flush: 4704 gal.

12-05-06 4636-4654' **Frac DS2 sands as follows:**  
80794# 20/40 sand in 588 bbls Lightning 17 frac fluid. Treated @ avg press of 1519 w/ avg rate of 25 BPM. ISIP 2000 psi. Calc flush: 4634 gal. Actual flush: 4158 gal.

12-05-06 4400-4406' **Frac PB11 sands as follows:**  
20165# 20/40 sand in 265 bbls Lightning 17 frac fluid. Treated @ avg press of 2077 w/ avg rate of 25 BPM. ISIP 1720 psi. Calc flush: 4398 gal. Actual flush: 4284 gal.

11/13/08 Parted rods. Updated rod & tubing details.

**PERFORATION RECORD**

Date	Interval	Tool	Holes
11-29-06	5494-5512'	4 JSPF	72 holes
12-04-06	5214-5222'	4 JSPF	32 holes
12-04-06	5204-5210'	4 JSPF	24 holes
12-04-06	5062-5072'	4 JSPF	40 holes
12-04-06	4993-5003'	4 JSPF	40 holes
12-05-06	4636-4654'	4 JSPF	72 holes
12-05-06	4400-4406'	4 JSPF	24 holes



Federal 4-21-9-16

851' FNL &amp; 782' FWL

NW/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33069; Lease # UTU-64379

## Federal 5-21-9-16

Spud Date: 10/21/06  
Put on Production: 12/02/06  
K.B.: 6048" G.L.: 6036"

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (310.62')  
DEPTH LANDED: 322.47' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 4 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 135 jts. (5927.96')  
DEPTH LANDED: 5941.21' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP: 50'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 175 jts (5640.6')  
TUBING ANCHOR: 5652.6' KB  
NO. OF JOINTS: 1 jts (31.6')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5687' KB  
NO. OF JOINTS: 1 jts (31.6')  
GAS ANCHOR: 5719.7'  
SEATING NIPPLE: 2-7/8" (1.2')  
NO. OF JOINTS: 3 jts (94.9')  
TOTAL STRING LENGTH: EOT @ 5822' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 33'  
SUCKER RODS: 1-4" x 3/4", 1 - 6 x 3/4", 1 - 8 x 3/4" pony rod; 99- 3/4" guided rods, 91 - 3/4" sucker rods, 30- 3/4" guided rods, 6- 1 1/2" weight bars  
PUMP SIZE: 2-1/2" x 1-3/4" x 20" x 24" RHAC w/SM plunger  
STROKE LENGTH: 74"  
PUMP SPEED, SPM: 5

FRAC JOB

11/22/06 5852-5860' **Frac CP5 sands as follows:**  
24030# 20/40 sand in 364 bbls Lightning 17 frac fluid. Treated @ avg press of 2590 psi w/avg rate of 24.8 BPM. ISIP 2850 psi. Calc flush: 5858 gal. Actual flush: 5334 gal.

11/22/06 5724-5732' **Frac CP4 sands as follows:**  
37476# 20/40 sand in 415 bbls Lightning 17 frac fluid. Treated @ avg press of 2400 psi w/avg rate of 24.9 BPM. ISIP 2500 psi. Calc flush: 5730 gal. Actual flush: 5216 gal.

11/22/06 5482-5502' **Frac CP1 sands as follows:**  
56615# 20/40 sand in 467 bbls Lightning 17 frac fluid. Treated @ avg press of 1940 psi w/avg rate of 24.9 BPM. ISIP 2200 psi. Calc flush: 5500 gal. Actual flush: 4977 gal.

11/24/06 4584-4652' **Frac D1, D2 sands as follows:**  
156867# 20/40 sand in 1002 bbls Lightning 17 frac fluid. Treated @ avg press of 1675 psi w/avg rate of 25.1 BPM. ISIP 1960 psi. Calc flush: 4650 gal. Actual flush: 4494 gal.

03/21/07 **Pump Change:** Updated rod and tubing detail.

6/1/2010 **Pump change.** Updated rod and tubing detail.

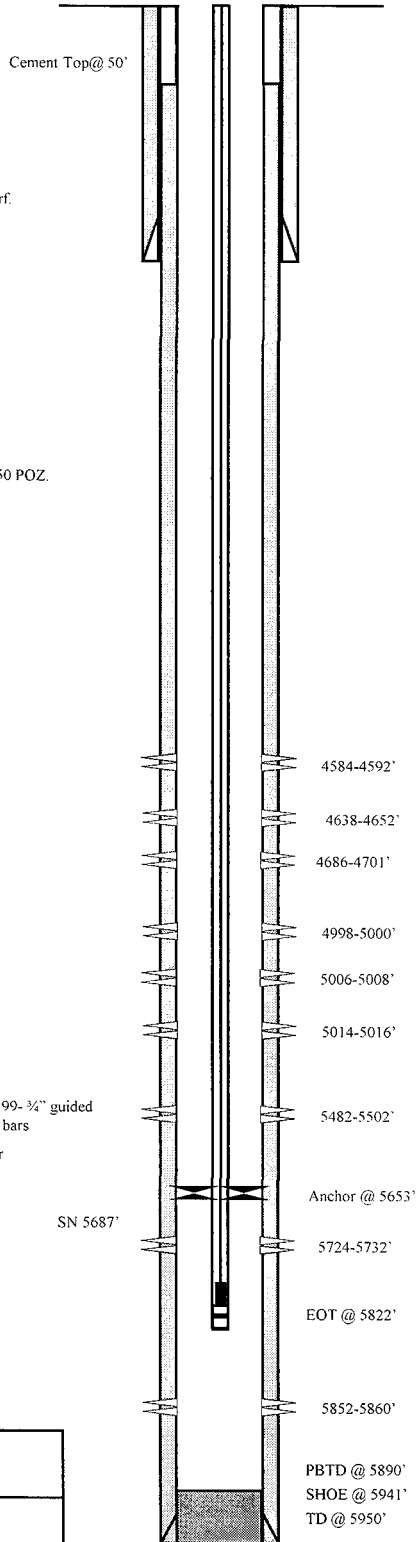
9/7/2010 **Pump change.** Updated rod and tubing detail.

10/22/10 4998-5016' **Frac A3 sands as follows:**  
61766# 20/40 sand in 501 bbls Lightning 17 frac fluid.

10/25/10 **Re-Completion**

PERFORATION RECORD

11/09/06	5852-5860'	4 JSPF	32 holes
11/22/06	5724-5732'	4 JSPF	32 holes
11/22/06	5482-5502'	4 JSPF	80 holes
11/24/06	4686-4701'	4 JSPF	60 holes
11/24/06	4638-4652'	4 JSPF	56 holes
11/24/06	4584-4592'	4 JSPF	32 holes
10/22/10	5014-5016'	3 JSPF	6 holes
10/22/10	5006-5008'	3 JSPF	6 holes
10/22/10	4998-5000'	3 JSPF	6 holes



Federal 5-21-9-16

2033' FNL &amp; 551' FWL

SW/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33020; Lease # UTU-64379

## NGC Fed. 31-20G-9-16

Spud Date: 1/04/85  
Put on Production: 4/08/85  
GL: 6051' KB: 6030'

Initial Production: 88 BOPD,  
62 MCFPD, 21 BWPD

## Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: K-55  
WEIGHT 24#  
LENGTH: 7 jts. (319.75')  
DEPTH LANDED: 319'  
HOLE SIZE 12-1/4"  
CEMENT DATA: 250 sxs Class "H"

PRODUCTION CASING

CSG SIZE: 5-1/2" / J-55 LT&C / 15.5#  
LENGTH: 74 jts.  
CSG SIZE: 5-1/2" / K-55 / 15.5#  
LENGTH: 74 jts.  
DEPTH LANDED: 6118'  
HOLE SIZE 7-7/8"  
CEMENT DATA: 240 sxs Lite, tail w/ 570 sxs Class "H"  
CEMENT TOP AT: 2450' per CBL

TUBING

SIZE/GRADE/WT: 2-7/8" / N-80 / 6.5#  
NO. OF JOINTS: 172 jts. (5457.93')  
TUBING ANCHOR: 5469.93' KB  
NO. OF JOINTS: 2 jts (62.00')  
SN LANDED AT: 1 10' x 2 7/8" (5533.03') KB  
NO. OF JOINTS: 1 jt (31.90')  
TOTAL STRING LENGTH: 5564.93' KB

SUCKER RODS

POLISHED ROD: 1-1/4" X 22'  
SUCKER RODS: 4 - 1-1/2" weight rods, 154 - 3/4" slick rods, 61 - 7/8" guided rods, 1-4', 1-6', 1-10' x 7/8" pony rods.  
PUMP SIZE: 2-1/2" x 1-1/2" x 16' RHAC  
STROKE LENGTH:  
PUMP SPEED:  
LOGS: DIL, LDT-CNL, EPT, LSS, GR, SP, ABCL, CBL

FRAC JOB

3/10/85 5530'-5556' **Frac zone as follows:**  
120,000# 20/40 sand + 30,000# 12/20 sand in 1263 bbl gel. Average treating pressure 2800 psi at 20 BPM. ISIP 2500 psi. Calc. flush: 5530 gal. Actual flush: 3654 gal. 3/10/85

3/17/85 4760'-4780' **Frac zone as follows:**  
45,000# 20/40 sand + 12,135# 12/20 sand in 1112 bbl gel. Average treating pressure 3100 psi at 20 BPM. ISIP 1800 psi. Calc. flush: 4760 gal. Actual flush: 1260 gal.

3/26/85 4692'-4702' **Frac zone as follows:**  
32,000# 20/40 sand + 14,000# 12/20 sand in 581 bbl gel. Average treating pressure 3200 psi at 25 BPM. ISIP 2000 psi. Calc. flush: 4692 gal. Actual flush: 3444 gal.

1/31/98 5082'-5105' **Frac zone as follows:**  
120,000# 20/40 sand in 489 bbl gel. Average treating pressure 6600 psi at 24.8 BPM. ISIP 4693 psi. Calc. flush: 1317 gal. Actual flush: 1737 gal.

Cement Top @ 2450'

4692'-4702'

4760'-4780'

5082'-5092'

5095'-5105'

Anchor @ 5469'

5530'-5556'

PERFORATION RECORD

3/02/85	5530'-5556'	4 SPF	104 holes
3/13/85	4764'-4780'	4 SPF	64 holes
3/15/85	4760'-4780'	4 SPF	80 holes
3/23/85	4692'-4702'	4 SPF	40 holes
1/30/98	5082'-5092'	4 SPF	40 holes
1/30/98	5095'-5105'	4 SPF	40 holes

SN @ 5533' KB  
EOT @ 5564' KB  
PBTD @ 5991' KB  
TD @ 6150'



NGC Fed. #31-20G-9-16  
540' FNL & 1944' FEL  
NWNE Section 20-T9S-R16E  
Duchesne Co, Utah  
API #43-013-31071; Lease #U-52018

## State 13-16-9-16

Spud Date: 4/9/08

Put on Production: 6/18/08

GL: 5959' KB: 5971'

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7jts (313.38')

HOLE SIZE: 12-1/4"

CEMENT DATA: To Surface with 160 sx Class 'G' cmt

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 132jts

HOLE SIZE: 7-7/8"

DEPTH LANDED: 5763.29'

CEMENT DATA: 275 sx Premilite II and 400 sx 50/50 Poz

CEMENT TOP AT: 46'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 177 jts (5460.9')

TUBING ANCHOR: 5472.9'

NO. OF JOINTS: 1jt (31.70')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5507.1'kb

NO. OF JOINTS: 1 jts (31.10')

TOTAL STRING LENGTH: EOT @ 5540

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' polished rod

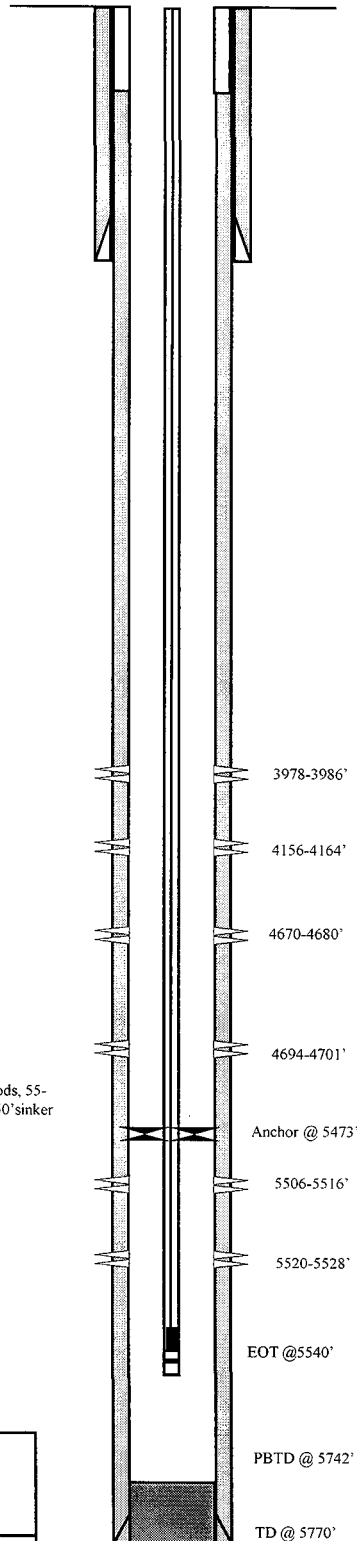
SUCKER RODS: 1 x 3/4" = 2' pony rods, 113-3/4" = 2825' guided rods, 55-3/4" = 1375' sucker rods, 41 -3/4" = 1025' guided rods, 6-1 1/2" = 150' sinker bars

PUMP SIZE: CDI 2-1/2" x 1-1/4" x 12" x 16' RHAC pump

STROKE LENGTH: 100"

PUMP SPEED, SPM: 4

Wellbore Diagram

FRAC JOB

06-06-08 5506-5616' **Frac CP1 sds as follows:**  
 40,770# 20/40 sand in 426 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1994 psi w/ ave rate of 23.8 BPM. ISIP 2188 psi. Actual Flush: 4914 gals.

06-06-08 4670-4680' **Frac D2 sds as follows:**  
 40,545# 20/40 sand in 410 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1811 psi w/ ave rate of 23.8 BPM. ISIP 1920 psi. Actual Flush: 4120 gals.

06-06-08 4156-4164' **Frac GB6 sds as follows:**  
 50,204# 20/40 sand in 438 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1855 psi w/ ave rate of 24.0 BPM. ISIP 1810 psi. Actual Flush: 3692 gals.

06-06-08 3978-3986' **Frac GB2 sds as follows:**  
 30,226# 20/40 sand in 366 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1552 psi w/ ave rate of 15.6 BPM. ISIP 1587 psi. Actual Flush: 3893 gals.

1/6/09 Tubing Leak. Updated rod & tubing details.  
 9/30/09 Tubing Leak. Updated rod & tubing  
 07/24/10 Pump Change. Updated rod & tubing.  
 4/19/2011 Tubing Leak. Updated rods & tubing.

PERFORATION RECORD

3978-3986'	4 JSPF	32 holes
4156-4164'	4 JSPF	32 holes
4670-4680'	4 JSPF	40 holes
4694-4701'	4 JSPF	28 holes
5506-5516'	4 JSPF	40 holes
5520-5528'	4 JSPF	32 holes

**NEWFIELD**

State 13-16-9-16  
 652' FSL & 524' FWL  
 SW/SW Section 16-T9S-R16E  
 Duchesne Co, Utah  
 API #43-013-33853; Lease #Utah State ML-16532

GMB 3-16-9-16H

Wellbore Diagram



Surface Location: NE/NW, Sec 16, T9S R16E

County/State: Greater Monument Butte, Duchesne County, Utah

Elevation: 5847' GL + 12' KB API: 43-013-50441

8-5/8" Casing Shoe 1,025	Wellhead		Casing Detail	Size	Wt.	Grade	Conn.	Top	Bottom	Burst	Collapse	ID	Drift	bbl/ft	Hole	TOC
			Surface	8-5/8"	24#	J-55	LTC	0	1,025							Surface
			Production	5-1/2"	17#	M-80	LTC	0	5,993	7,740	7,020	4.892	4.767	0.0233	7-7/8"	Port Collar: 5,654'nd to Surface
			Production	4-1/2"	11.6#	P-110	LTC	5,993 TVD	10,249 6,011	7,774	8,510	4.000	3.875	0.0155	6-1/8"	

burst &amp; collapse values are book, no additional safety factors have been applied

Tubing Detail	Size	Wt.	Grade	Conn.	Length	Top	Bottom	Joints
TBG DETAIL: sand drain valve, 3 jts 2 7/8" tbg., Cavins De-sander, 2 7/8" sub, 1 jt 2 7/8" tbg., SN, 1 jt 2 7/8" tbg., 5 1/2" TAC, 187 jts 2 7/8" tbg and tbg hanger. TA @ 5,870'. SN @ 5,903'. EOT @ 6,052' NOTE on Tubing Anchor: TA (shortened inner springs & beveled outer springs--4.625" OD)								

WELLBORE FLUIDS  
Lateral section fluid= +8.4 ppg "clean" brine

Rod Detail	Size	Grade	Count	Length	Top	Bottom
Pump and Rod Detail: Weatherford MacGyver 1 3/4" x 28' rod pump, stabilizer sub, on/off tool, stabilizer sub, SE 4 Co-rod, 1- 8', 6', 4', 2' x 7/8" pony rods, 1 1/2" x 26' polished rod NOTE on Pump: with CoRod, must have Clutch (on/off tool) installed.						

Proposed Frac Data			Packers Plus 12 Stage StackFrac HD Stimulation Liner										Prop type/ size	Prop Vol (lbs)	Total Clean Vol (bbls)	
	Top	Bottom														
Toe Section	10,249	10,249	Packers Plus 4-1/2" Toe Circulating Sub w/1,000" Seat for 1,250" SF2 High Pressure Ball (Actuated at 1,098 psi). And Open Hole TD													
Stage 1	10,087	10,249	Dual Hydraulic Frac Port:	Depth 10,160	Ball OD (in.) NA	Seat ID (in.) NA	Vol. to Seat (bbl) 204.33	Actual Vol. (bbl) NA	Difference (bbl)	Ball Action (ΔP)		100 mesh sand	0			
OH Anchor/Packer	10,080	10,087	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											30/50 mesh sand	0	1,903
Mechanical Packer 1	10,002	10,007	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	34,144	2,342
Stage 2	9,682	10,002	FracPort 2:	Depth 9,841	Ball OD (in.) 2,125	Seat ID (in.) 2,000	Vol. to Seat (bbl) 199.39	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	30,760			
Mechanical Packer 2	9,677	9,682	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	36,389	2,775
Stage 3	9,914	9,677	FracPort 3:	Depth 9,617	Ball OD (in.) 2,250	Seat ID (in.) 2,125	Vol. to Seat (bbl) 194.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	18,835			
Mechanical Packer 3	9,354	9,359	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	7,548	2,716
Stage 4	9,035	9,354	FracPort 4:	Depth 9,193	Ball OD (in.) 2,375	Seat ID (in.) 2,250	Vol. to Seat (bbl) 189.36	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	0			
Mechanical Packer 4	9,030	9,035	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	28,177	4,116
Stage 5	8,710	9,030	FracPort 5:	Depth 8,869	Ball OD (in.) 2,500	Seat ID (in.) 2,375	Vol. to Seat (bbl) 184.35	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	36,211			
Mechanical Packer 5	8,705	8,710	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	37,277	3,907
Stage 6	8,386	8,705	FracPort 6:	Depth 8,544	Ball OD (in.) 2,625	Seat ID (in.) 2,500	Vol. to Seat (bbl) 179.32	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	30,591			
Mechanical Packer 6	8,381	8,386	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	32,229	2,784
Stage 7	8,066	8,381	FracPort 7:	Depth 8,220	Ball OD (in.) 2,750	Seat ID (in.) 2,625	Vol. to Seat (bbl) 174.30	Actual Vol. (bbl)	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	21,643			
Mechanical Packer 7	8,061	8,066	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	35,076	3,706
Stage 8	7,743	8,061	FracPort 8:	Depth 7,901	Ball OD (in.) 2,875	Seat ID (in.) 2,750	Vol. to Seat (bbl) 169.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	30,420			
Mechanical Packer 8	7,738	7,743	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	30,308	2,777
Stage 9	7,418	7,738	FracPort 9:	Depth 7,577	Ball OD (in.) 3,000	Seat ID (in.) 2,875	Vol. to Seat (bbl) 164.35	Actual Vol. (bbl)	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	14,314			
Mechanical Packer 9	7,413	7,418	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	25,505	1,889
Stage 10	6,768	7,413	FracPort 10:	Depth 7,252	Ball OD (in.) 3,125	Seat ID (in.) 3,000	Vol. to Seat (bbl) 159.32	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	3,467			
Mechanical Packer 10	7,088	7,093	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	37,984	2,804
Stage 11	6,768	7,088	FracPort 11:	Depth 6,927	Ball OD (in.) 3,250	Seat ID (in.) 3,125	Vol. to Seat (bbl) 169.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	36,949			
Mechanical Packer 11	6,763	6,768	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)											100 mesh sand	31,284	2,755
Stage 12	6,445	6,763	FracPort 11:	Depth 6,601	Ball OD (in.) 3,375	Seat ID (in.) 3,250	Vol. to Seat (bbl) 154.29	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)		30/50 mesh sand	21,198			
Mechanical Packer 12	6,438	6,445	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)													Total Fluid
OH Anchor/Packer	5,451	5,456	Packer Plus 8-5/8" x 5-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,049psi)													34,456
Rockseal II Packer	5,372	5,377	Packer Plus 8-5/8" x 5-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,046psi)													(bbl)
Lat Length		3,804										Sand Total	100 mesh sand	335,921		
Total Stim. Lateral		3,804										580,309	30/50 mesh sand	244,388		
Avg. Stage Length		317	*between packers										# sand per foot of lateral	153		

6.5"x4.5X XO 5,993

12

11

10

9

8

7

6

5

4

3

2

1

MD TD 10,259  
TVD TD 6,011

## Water Analysis Report

Production Company: NEWFIELD PRODUCTION

Sales Rep: Darren Betts

Well Name: SWDIF

Lab Tech: Gary Peterson

Sample Point: After production filter

Sample Date: 12/9/2011

Sample ID: WA-204150

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	12/9/2011	Sodium (Na):	6799.09	Chloride (Cl):	10000.00
System Temperature 1 (°F):	300.00	Potassium (K):	26.10	Sulfate (SO4):	2.00
System Pressure 1 (psig):	3000.00	Magnesium (Mg):	9.40	Bicarbonate (HCO3):	1024.80
System Temperature 2 (°F):	70.00	Calcium (Ca):	26.80	Carbonate (CO3):	0.00
System Pressure 2 (psig):	14.70	Strontium (Sr):	0.00	Acetic Acid (CH3COO)	0.00
Calculated Density (g/ml):	1.01	Barium (Ba):	24.20	Propionic Acid (C2H5COO)	0.00
pH:	8.20	Iron (Fe):	0.47	Butanoic Acid (C3H7COO)	0.00
Calculated TDS (mg/L):	17913.62	Zinc (Zn):	0.00	Isobutyric Acid ((CH3)2CHCOO)	0.00
CO2 in Gas (%):	0.00	Lead (Pb):	0.70	Fluoride (F):	0.00
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:	0.00	Bromine (Br):	0.00
H2S in Gas (%):	0.00	Manganese (Mn):	0.06	Silica (SiO2):	0.00
H2S in Water (mg/L):	10.00				

## Notes:

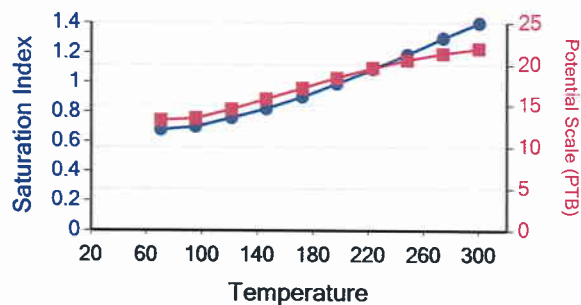
(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	0.68	13.26	0.21	0.60	2.60	0.26	0.67	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.70	13.48	0.00	0.00	2.38	0.26	0.78	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.76	14.55	0.00	0.00	2.24	0.26	0.91	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.82	15.79	0.00	0.00	2.16	0.26	1.02	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.90	17.10	0.00	0.00	2.12	0.26	1.13	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.99	18.39	0.00	0.00	2.12	0.26	1.22	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	1.09	19.55	0.00	0.00	2.15	0.26	1.31	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	1.19	20.54	0.00	0.00	2.21	0.26	1.37	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	1.30	21.32	0.00	0.00	2.28	0.26	1.42	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	1.40	21.90	0.00	0.00	2.36	0.26	1.46	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

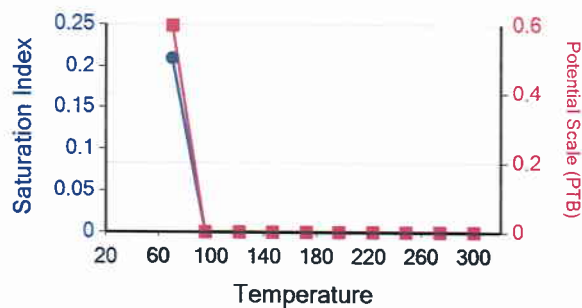
		Hemihydrate CaSO4·0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.45	0.28	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.59	0.28	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.89	0.28	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.76	0.28	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	0.28	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	0.28	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.60	0.28	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.30	0.28	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.03	0.28	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Lead Sulfide

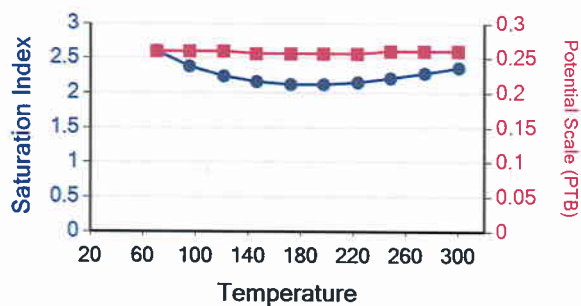
Calcium Carbonate



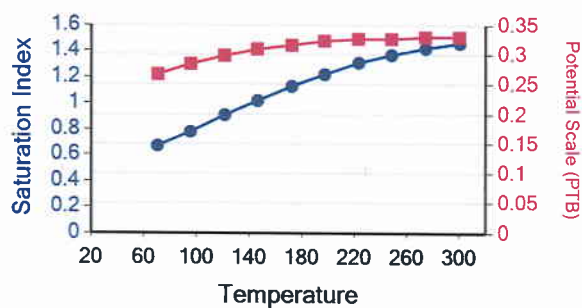
Barium Sulfate



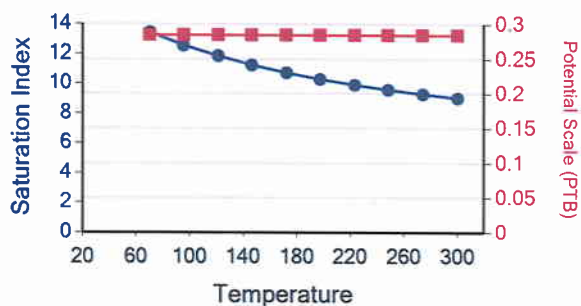
Iron Sulfide



Iron Carbonate



Lead Sulfide



## Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**Sales Rep: **Darren Betts**Well Name: **FED 1-20-9-16**Lab Tech: **Gary Peterson**Sample Point: **Water leg**Sample Date: **3/15/2012**Sample ID: **WA-209564**Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	3/19/2012	Sodium (Na):	6379.81	Chloride (Cl):	9000.00
System Temperature 1 (°F):	300.00	Potassium (K):	51.60	Sulfate (SO <sub>4</sub> ):	30.00
System Pressure 1 (psig):	3000.00	Magnesium (Mg):	9.10	Bicarbonate (HCO <sub>3</sub> ):	1561.60
System Temperature 2 (°F):	70.00	Calcium (Ca):	9.30	Carbonate (CO <sub>3</sub> ):	0.00
System Pressure 2 (psig):	14.70	Strontium (Sr):	0.00	Acetic Acid (CH <sub>3</sub> COO)	0.00
Calculated Density (g/ml):	1.01	Barium (Ba):	1.80	Propionic Acid (C <sub>2</sub> H <sub>5</sub> COO)	0.00
pH:	9.30	Iron (Fe):	0.20	Butanoic Acid (C <sub>3</sub> H <sub>7</sub> COO)	0.00
Calculated TDS (mg/L):	17043.55	Zinc (Zn):	0.02	Isobutyric Acid ((CH <sub>3</sub> ) <sub>2</sub> CHCOO)	0.00
CO <sub>2</sub> in Gas (%):	0.00	Lead (Pb):	0.09	Fluoride (F):	0.00
Dissolved CO <sub>2</sub> (mg/L):	0.00	Ammonia NH <sub>3</sub> :	0.00	Bromine (Br):	0.00
H <sub>2</sub> S in Gas (%):	0.00	Manganese (Mn):	0.03	Silica (SiO <sub>2</sub> ):	0.00
H <sub>2</sub> S in Water (mg/L):	0.50				

## Notes:

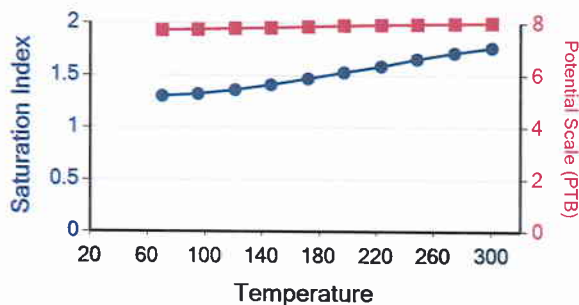
(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Celestite SrSO <sub>4</sub>		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	1.30	7.71	0.26	0.48	1.98	0.11	1.33	0.14	0.00	0.00	0.00	0.00	0.00	0.00	9.32	0.01
95	346	1.32	7.74	0.02	0.05	1.76	0.11	1.44	0.14	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.01
121	678	1.36	7.77	0.00	0.00	1.60	0.11	1.55	0.14	0.00	0.00	0.00	0.00	0.00	0.00	8.35	0.01
146	1009	1.41	7.81	0.00	0.00	1.49	0.11	1.65	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.96	0.01
172	1341	1.47	7.85	0.00	0.00	1.43	0.11	1.73	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.63	0.01
197	1673	1.53	7.89	0.00	0.00	1.40	0.11	1.80	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.35	0.01
223	2004	1.59	7.92	0.00	0.00	1.39	0.11	1.85	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.01
248	2336	1.66	7.95	0.00	0.00	1.39	0.11	1.88	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.01
274	2668	1.72	7.98	0.00	0.00	1.40	0.11	1.89	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.63	0.01
300	3000	1.77	8.00	0.00	0.00	1.41	0.11	1.87	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.41	0.01

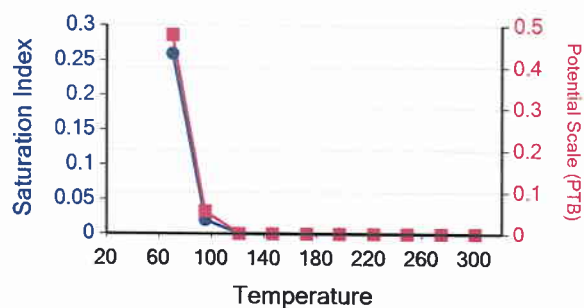
		Hemihydrate CaSO <sub>4</sub> ·0.5H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.38	0.04	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.53	0.04	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.01	10.80	0.04	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.01	10.17	0.04	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.01	9.63	0.04	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.01	9.15	0.04	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.01	8.72	0.04	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.01	8.33	0.04	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.01	7.97	0.04	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.01	7.64	0.04	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide

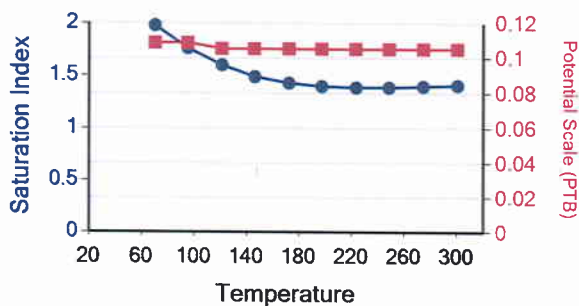
Calcium Carbonate



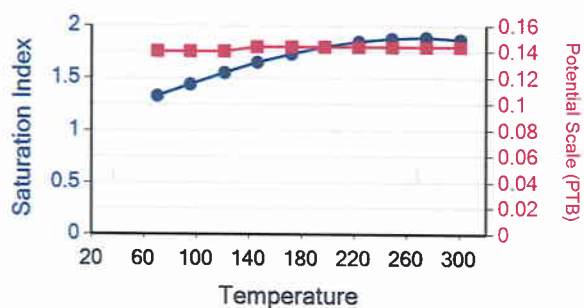
Barium Sulfate



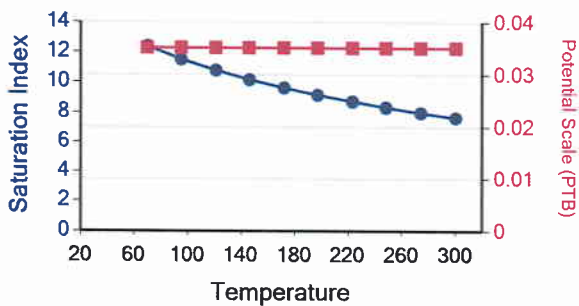
Iron Sulfide



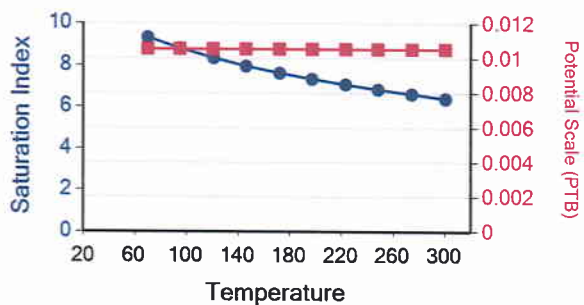
Iron Carbonate



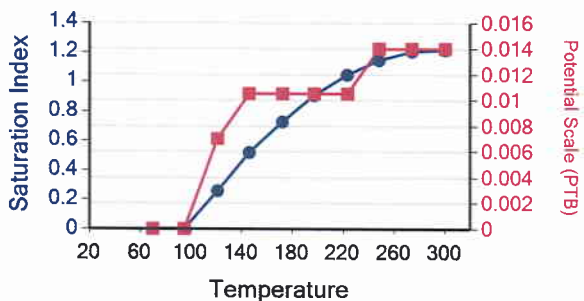
Lead Sulfide



Zinc Sulfide



Zinc Carbonate



**Attachment "G"**

**Federal #1-20-9-16  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Calculated Frac Gradient (psi/ft)	Pmax
Top	Bottom				
5526	5544	5535	2165	0.82	2129
5124	5138	5131	2760	0.97	2727
4780	4795	4788	1800	0.81	1769 ←
4680	4694	4687	1960	0.85	1930
4160	4167	4164	2025	0.92	1998
				<b>Minimum</b>	<u>1769</u>

**Calculation of Maximum Surface Injection Pressure**

$P_{max} = (\text{Frac Grad} - (0.433 \times 1.015)) \times \text{Depth of Top Perf}$   
 where pressure gradient for the fresh water is .433 psi/ft and  
 specific gravity of the injected water is 1.015.

$$\text{Frac Gradient} = (\text{ISIP} + (0.433 \times \text{Top Perf.})) / \text{Top Perf.}$$

**Please note:** These are existing perforations; additional perforations may be added during the actual conversion procedure.



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: 11-Jul-07

Day: 1

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: Wt:

Grd: Pkr/EOT @:

BP/Sand PBTD:

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: 10-Jul-07

SITP: SICP: 0

Install 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5929' & cement top @ 60' Perforate stage #1. CP1 sds @ 5526-44' w/ 3 1/8" Slick guns (19 gram, .49" HE, 120 , 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 72 shots. 143 BWTR. SIFN.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 143

Starting oil rec to date:

Fluid lost/recovered today: 0

Oil lost/recovered today:

Ending fluid to be recovered: 143

Cum oil recovered:

IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

Base Fluid used: Job Type:

Company:

Procedure or Equipment detail:

## COSTS

Weatherford BOP \$450

NPC NU crew \$300

NDSI trucking \$800

Perforators LLC \$6,800

Drilling cost \$328,488

Zubiate hot oil \$420

Location preparation \$300

NPC wellhead \$1,500

Benco - anchors \$1,200

Admin. Overhead \$3,000

NPC Supervisor \$300

Max TP: Max Rate: Total fluid pmpd:

Avg TP: Avg Rate: Total Prop pmpd:

ISIP: 5 min: 10 min: 15 min:

Completion Supervisor: Orson Barney

DAILY COST: \$343,558

TOTAL WELL COST: \$343,558



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: Wt: Grd: Pkr/EOT @: BP/Sand PBTD:

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 0

## Day 2(a):

NU BJ Services "Ram head" frac flange. RU BJ & frac stage #1 (CP1 sds) W/ 40,327# 20/40 sand in 416 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 2756 psi. Treated @ ave press of 2186 psi W/ ave rate of 24.7 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #2. ISIP--2165 psi. Leave pressure on well. Est 559 BWTR.

## See day 2(b)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 143 Starting oil rec to date:  
 Fluid lost/recovered today: 416 Oil lost/recovered today:  
 Ending fluid to be recovered: 559 Cum oil recovered:  
 IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: CP1 sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

467 gals of fresh water spacer &amp; Cross-link

3200 gals of pad

2500 gals W/ 1-5 ppg of 20/40 sand

5026 gals of 5-8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 5002 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 2481 Max Rate: 24.8 BPM Total fluid pmpd: 416 bbls

Avg TP: 2186 Avg Rate: 24.7 BPM Total Prop pmpd: 40,327#

ISIP: 2165 5 min: 10 min: FG: .83

Completion Supervisor: Gary Dietz

BJ Services--CP1 \$22,542

CD wtr &amp; truck \$700

NPC fuel gas \$110

Weatherford service \$1,150

NPC supervision \$75

DAILY COST: \$24,577

TOTAL WELL COST: \$368,135



308/10

## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: Wt: Grd: Pkr/EOT @: BP/Sand PBTD: 5230'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 1399

## Day 2(b):

RU Perforators WLT, crane & lubricator. Run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 5230'. Perf stage #2 (LODC sds) @ 5124-38' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #2 W/ 60,273# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 3621 psi (on third attempt of pressuring against perfs). Treated @ ave press of 2674 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #3. ISIP-2760 psi. Leave pressure on well. Est 1069 BWTR.

## See day 2(c)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 559 Starting oil rec to date:  
 Fluid lost/recovered today: 510 Oil lost/recovered today:  
 Ending fluid to be recovered: 1069 Cum oil recovered:  
 IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: LODC sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

597 gals of fresh water spacer &amp; Cross-link

4600 gals of pad

3000 gals W/ 1-5 ppg of 20/40 sand

6000 gals of 5-8 ppg of 20/40 sand

1349 gals W/ 8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 4582 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 3220 Max Rate: 24.9 BPM Total fluid pmpd: 510 bbls

Avg TP: 2674 Avg Rate: 24.8 BPM Total Prop pmpd: 60,273#

ISIP: 2760 5 min: 10 min: FG: .97

Completion Supervisor: Gary Dietz

## COSTS

BJ Services--LODC	\$13,010
CD wtr & truck	\$1,000
NPC fuel gas	\$150
Weatherford frac plug	\$2,400
Perforators LLC-LODC	\$4,165
NPC supervision	\$75

DAILY COST: \$20,800

TOTAL WELL COST: \$388,935



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## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: Wt: Grd: Pkr/EOT @: BP/Sand PBTD: 5230', 4900'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 2003

## Day 2(c):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 15' X 3/18" slick perf gun. Set plug @ 4900'. Perf stage #3 (C sds) @ 4780-95' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #3 W/ 60,060# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 4170 psi (on sixth attempt of pressuring against perfs). Treated @ ave press of 1833 psi W ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #4. ISIP--1800 psi. Leave pressure or well. Est 1579 BWTR.

See day 2(d)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 1069 Starting oil rec to date:  
 Fluid lost/recovered today: 510 Oil lost/recovered today:  
 Ending fluid to be recovered: 1579 Cum oil recovered:  
 IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: C sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

509 gals of fresh water spacer &amp; Cross-link

4600 gals of pad

3000 gals W/ 1-5 ppg of 20/40 sand

6000 gals of 5-8 ppg of 20/40 sand

1756 gals W/ 8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 4288 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 2285 Max Rate: 24.9 BPM Total fluid pmpd: 510 bbls

Avg TP: 1833 Avg Rate: 24.8 BPM Total Prop pmpd: 60,060#

ISIP: 1800 5 min: 10 min: FG: .81

Completion Supervisor: Gary Dietz

BJ Services--C \$13,010

CD wtr &amp; truck \$1,000

NPC fuel gas \$150

Weatherford frac plug \$2,400

Perforators LLC--C \$3,830

NPC supervision \$75

DAILY COST: \$20,465

TOTAL WELL COST: \$409,400



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: \_\_\_\_\_ Wt: \_\_\_\_\_

Grd: \_\_\_\_\_ Pkr/EOT @: \_\_\_\_\_

BP/Sand PBTD: 5230', 4900'

BP/Sand PBTD: 4740'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: \_\_\_\_\_ SICP: 1420

## Day 2(d):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 4740'. Perf stage #4 (D: sds) @ 4680-94' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #4. Unable to breakdown perfs after several attempts W/ 4200 psi max. RL WLT & RIH W/ 3 1/2" dumpbailer W/ 8 gals 15% HCL acid. Tag sd @ 4661'. Dump acid & LD bailer. Flow well back on chokes for 2 1/2 hrs, rec es 150 BTF. Recovered acid & strung out sand. Flowing fairly clean @ end. Casing pressure @ 150 psi. RU BJ & breakdown D2 perfs @ 1889 psi. Frac stage #4 W/ 79,938# 20/40 sand in 623 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Treated @ ave press of 1860 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #5. ISIP--1960 psi. Leave pressure on well. Est 2052 BWTR.

See day 2(e)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 1579

Starting oil rec to date: \_\_\_\_\_

Fluid lost/recovered today: 473

Oil lost/recovered today: \_\_\_\_\_

Ending fluid to be recovered: 2052

Cum oil recovered: \_\_\_\_\_

IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## STIMULATION DETAIL

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: D2 sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

341 gals of fresh water spacer &amp; Cross-link

6000 gals of pad

4000 gals W/ 1-5 ppg of 20/40 sand

8000 gals of 5-8 ppg of 20/40 sand

2397 gals W/ 8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 4120 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 2399 Max Rate: 24.9 BPM Total fluid pmpd: 623 bbls

Avg TP: 1860 Avg Rate: 24.8 BPM Total Prop pmpd: 79,938#

ISIP: 1960 5 min: \_\_\_\_\_ 10 min: \_\_\_\_\_ FG: .85

Completion Supervisor: Gary Dietz

## COSTS

BJ Services--D2 \$16,739

CD wtr &amp; truck \$1,400

NPC fuel gas \$225

Weatherford frac plug \$2,400

Perforators LLC--D2 \$4,390

NPC supervision \$75

DAILY COST: \$25,229

TOTAL WELL COST: \$434,629



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: Wt:

Grd: Pkr/EOT @:

BP/Sand PBTD: 5230', 4900'

BP/Sand PBTD: 4740', 4250'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 1740

Day 2(e):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 7' X 3/18" slick perf gun. Set plug @ 4250'. Perf stage #5 (GB6 sds) @ 4160-67' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #5. Pressure against perfs to 4200 psi--holding solid.

\*\*BJ Blender will not run !!\*\*

Shut well in with pressure overnight. Est 2052 BWTR.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2052

Starting oil rec to date:

Fluid lost/recovered today:

Oil lost/recovered today:

Ending fluid to be recovered:

Cum oil recovered:

IFL: FFL: FTP:

Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

Base Fluid used: Job Type:

Company:

Procedure or Equipment detail:

## COSTS

Weatherford frac plug \$2,400

Perforators LLC--GB6 \$2,870

NPC supervision \$75

Max TP: Max Rate: Total fluid pmpd:

Avg TP: Avg Rate: Total Prop pmpd:

ISIP: 5 min: 10 min: FG:

Completion Supervisor: Gary Dietz

DAILY COST: \$5,345

TOTAL WELL COST: \$439,974



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## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 21, 2007

Day: 3

Operation: Completion

Rig: NC #1

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: 2 7/8" Wt: 6.5# Grd: J-55 Pkr/EOT @: 4313' BP/Sand PBTD: 5230', 4900'  
 BP/Sand PBTD: 4740'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 20, 2007

SITP: SICP: 2250

2250 psi on well. RU BJ Services & breakdown stage #5 (GB6 sds) @ 4201 psi. Frac stage #5 W/ 28,569# 20/40 sand in 317 bbls Lightning frac 17 fluid. Treated @ ave press of 1594 psi W/ ave rate of 24.9 BPM. ISIP--1545 psi. RD BJ & WLT. Begin immediate flowback of frac on 12/64 choke @ 1 BPM. Zone flowed 2.5 hrs rec add'l 135 BTF (est 12% of combined frac load of 2376 bbls--includes 150 bbls f/ previous FB). MIRU NC #1. ND Cameron BOP & 5M frac head. Install 3M production tbg head & NL Weatherford Schaeffer BOP. Talley, PU & TIH W/ new Weatherford 4 3/4" "Chomp" bit, bit sub & new 2 7/8 8rd 6.5# J-55 tbg. Tag fill @ 4181'. Tbg displaced 10 BW on TIH. RU power swivel. C/O sd to composite plug @ 4250'. Drill out plug in 25 minutes. Circ hole clean W/ no fluid loss. Hang back swivel. SIFN W/ EOT @ 4313'. Est 2224 BWTR.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2052 Starting oil rec to date: \_\_\_\_\_  
 Fluid lost/recovered today: 172 Oil lost/recovered today: \_\_\_\_\_  
 Ending fluid to be recovered: 2224 Cum oil recovered: \_\_\_\_\_  
 IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail:

780 gals of 4% Techni-Hib 767W "pre-pad"

682 gals of fresh water spacer &amp; Cross-link

2400 gals of pad

1875 gals W/ 1-5 ppg of 20/40 sand

3505 gals of 5-8 ppg of 20/40 sand

Flush W/ 4074 gals of slick water

Max TP: 1867 Max Rate: 25 BPM Total fluid pmpd: 317 bbls

Avg TP: 1594 Avg Rate: 24.9 BPM Total Prop pmpd: 28,569#

ISIP: 1545 5 min: 10 min: FG: .81

Completion Supervisor: Gary Dietz

NC #1 rig	\$5,452
Weatherford BOP	\$250
BJ Services - GB6	\$20,906
CD wtr & truck	\$520
NPC fuel gas	\$100
Marta-Co - FB fittings	\$300
B & L - new J55 tbg	\$32,771
Nabors swivel	\$750
CD wtr transfer	\$300
Unichem chemicals	\$300
Weatherford "chomp" bit	\$1,450
NPC sfc equipment	\$130,000
Mecham labor/welding	\$19,500
NPC supervision	\$300
DAILY COST:	\$212,899
TOTAL WELL COST:	\$652,873



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**Day: 4**

**Rig: NC #1**

**Sand 5957.82'**

**SPF/#shots**

**SITP:**                      **SICP:**

Nabors Pwr Swvl	\$850
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**TOTAL WELL COST: \$667,693**

**Day: 5**

Rig: NC #1

**Sand 5957.82'**

SPF/#shots

**SITP:**                      **SICP:**

**TOTAL WELL COST:** \$673,833



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 26, 2007

Day: 6

Operation: Completion

Rig: NC #1

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5957.82'  
 Tbg: Size: 2 7/8" Wt: 6.5# Grd: J-55 Pkr/EOT @: 5614.97' Sand 5957.82'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 25, 2007

SITP: SICIP:

6:30 AM OWU, RIH 45-3/4X25' Slick Rods, 100-3/4X25' Guided Rods, 3/4X8'-6'-4'-2' Ponys, 1 1/2X26' Polish Rod, R/U Unit, R/L Rig Pump, Fill Tbg W/-1 Bbl Wtr, Stroke Unit & Tbg To 800 Psi, Good Test. R/D Eq, R/D Rig. POP @ 10:30AM, 120" SL, 5 SPM ( Final Report )

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2257 Starting oil rec to date: \_\_\_\_\_  
 Fluid lost/recovered today: 1 Oil lost/recovered today: \_\_\_\_\_  
 Ending fluid to be recovered: 2258 Cum oil recovered: \_\_\_\_\_  
 IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## TUBING DETAIL

KB = 12.0  
 179 Jts Tbg = 5506.29'  
 T/A = 2.80 @ 5518.29 KB  
 1 Jt Tbg = 30.52  
 S/N = 1.10 @ 5551.61' KB  
 2 Jts Tbg = 61.81'  
 N/C = .45 @ 5614.97 KB

## ROD DETAIL

1 1/2X26' Polish Rod  
 3/4X2'-4'-6'-8' Ponys  
 100-3/4X25' Guided Rods  
 95-3/4X25' Slick Rods  
 20-3/4X25' Guided Rods  
 6-1 1/2X25' Wt Bars  
 CDI-2 1/2X1 1/2X16X20'  
 RHAC.

## COSTS

NC #1 rig	\$2,493
NPC Supervision	\$300
ZHO	\$1,030
NPC Frac Tnks 7x8 Dys	\$2,240
NPC Swab Tnk 1x4 Dys	\$160
NPC Frac Head	\$500
B/Grade Rod String	\$10,004
CD Wtr Trucking	\$300

Completion Supervisor: Duane Freston.

DAILY COST: \$17,027

TOTAL WELL COST: \$690,860

## ATTACHMENT H

### WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1. Set CIBP @ 4110'
2. Plug #1 Set 100' plug on top of CIBP using 12 sx Class "G" cement
3. Plug #2 168' balance plug using 19 sx Class "G" cement 50' above Trona-Bird's Nest extending 50' below base of Mahogany Oil Shale
4. Plug #3 120' balance plug using 14sx Class "G" cement 60' above Uinta/Green River and extending 60' below
5. Plug #4 Pump 43 sx Class "G" cement down 5 ½" casing to 374'

The approximate cost to plug and abandon this well is \$42,000.

## FEDERAL 1-20-9-16

Spud Date: 05/16/07  
Put on Production: 07/25/07  
GL: 6038' KB: 6050'

### Proposed P & A Wellbore Diagram

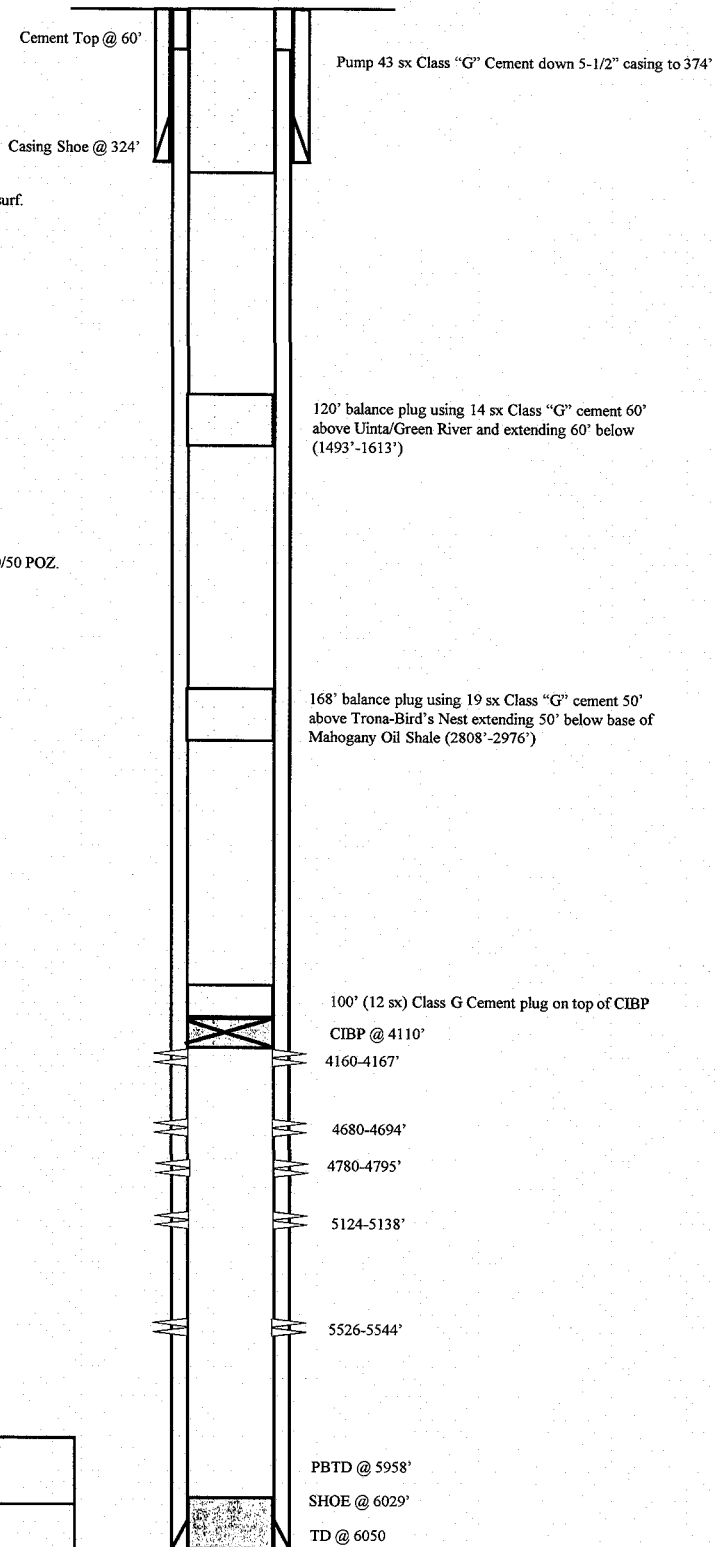
Initial Production: BOPD,  
MCFD, BWPD

#### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (312.36')  
DEPTH LANDED: 324.21' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 137 jts. (6015.83')  
DEPTH LANDED: 6029.08' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 60'



### NEWFIELD

### FEDERAL 1-20-9-16

617'FNL & 652' FEL  
NE/NE Section 20-T9S-R16E  
Duchesne Co, Utah  
API #43-013-33066; Lease # UTU-52018

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-392

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 12, 13, 15, 17, 19, 20, 21, 22, 23, 24, AND 25, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17<sup>th</sup> Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

Greater Monument Butte Unit:

Monument Federal 22-12J well located in SE/4 NW/4, Section 12, Township 9 South, Range 16 East  
API 43-013-15796  
Federal 5-13-9-16 well located in SW/4 NW/4, Section 13, Township 9 South, Range 16 East  
API 43-013-32658  
Federal 13-15-9-16 well located in SW/4 SW/4, Section 15, Township 9 South, Range 16 East  
API 43-013-33136  
Federal 7-17-9-16 well located in SW/4 NE/4, Section 17, Township 9 South, Range 16 East  
API 43-013-33030  
Federal 1-19-9-16 well located in NE/4 NE/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33062  
Federal 5-19-9-16 well located in SW/4 NW/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33174  
Federal 1-20-9-16 well located in NE/4 NE/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33066  
Federal 3-20-9-16 well located in NE/4 NW/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33067  
Federal 5-20-9-16 well located in SW/4 NW/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33104  
Federal 9-20-9-16 well located in NE/4 SE/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33068  
Federal 9-21-9-16 well located in NE/4 SE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-33145  
Monument Federal 31-21-9-16Y well located in NW/4 NE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-31726  
Federal 1-22-9-16 well located in NE/4 NE/4, Section 22, Township 9 South, Range 16 East  
API 43-013-32612  
Federal 7-22-9-16 well located in SW/4 NE/4, Section 22, Township 9 South, Range 16 East  
API 43-013-33027  
Federal 3-23-9-16 well located in NE/4 NW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33176

Federal 11-23-9-16 well located in NE/4 SW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33178

Federal 15-23-9-16 well located in SW/4 SE/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33182

Federal 3-24-9-16 well located in NE/4 NW/4, Section 24, Township 9 South, Range 16 East  
API 43-013-33084

Federal 15-24-9-16 well located in SW/4 SE/4, Section 24, Township 9 South, Range 16 East  
API 43-013-33344

Federal 21-25Y well located in NE/4 NW/4, Section 25, Township 9 South, Range 16 East  
API 43-013-31394

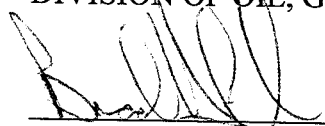
The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 22<sup>nd</sup> day of May, 2012.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING

A handwritten signature in black ink, appearing to read 'Brad Hill', is written over a horizontal line.

Brad Hill  
Permitting Manager

**Newfield Production Company**

**MONUMENT FEDERAL 22-12J, FEDERAL 5-13-9-16, FEDERAL 13-15-9-16, FEDERAL 7-17-9-16, FEDERAL 1-19-9-16, FEDERAL 5-19-9-16, FEDERAL 1-20-9-16, FEDERAL 3-20-9-16, FEDERAL 5-20-9-16, FEDERAL 9-20-9-16, FEDERAL 9-21-9-16, MONUMENT FEDERAL 31-21-9-16Y, FEDERAL 1-22-9-16, FEDERAL 7-22-9-16, FEDERAL 3-23-9-16, FEDERAL 11-23-9-16, FEDERAL 15-23-9-16, FEDERAL 3-24-9-16, FEDERAL 15-24-9-16, FEDERAL 21-25Y**

**Cause No. UIC-392**

Publication Notices were sent to the following:

Newfield Production Company  
1001 17th Street, Suite 2000  
Denver, CO 80202

Uintah Basin Standard  
268 S 200 E  
Roosevelt, UT 84066  
via e-mail [ubs@ubstandard.com](mailto:ubs@ubstandard.com)

Salt Lake Tribune  
P O Box 45838  
Salt Lake City, UT 84145  
via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Vernal Office  
Bureau of Land Management  
170 S 500 E  
Vernal, UT 84078

SITLA  
675 E 500 S Ste 500  
Salt Lake City, UT 84102-2818

Duchesne County Planning  
P O Box 317  
Duchesne, UT 84021-0317

Bruce Suchomel  
US EPA Region 8  
MS 8P-W-GW  
1595 Wynkoop Street  
Denver, CO 80202-1129

Newfield Production Company  
Rt 3 Box 3630  
Myton, UT 84052

  
\_\_\_\_\_



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

May 22, 2012

Via e-mail [legals@ubstandard.com](mailto:legals@ubstandard.com)

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure

**Jean Sweet - Re: Notice of Agency Action – Newfield Production Company Cause No. UIC-392**

---

**From:** Cindy Kleinfelter <classifieds@ubstandard.com>  
**To:** Jean Sweet <jsweet@utah.gov>  
**Date:** 5/23/2012 3:07 PM  
**Subject:** Re: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

---

On 5/22/2012 2:09 PM, Jean Sweet wrote:

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet, Executive Secretary  
Utah Div. of Oil, Gas & Mining  
1594 West Temple, Suite 1210  
Salt Lake City, UT  
801-538-5329  
[jsweet@utah.gov](mailto:jsweet@utah.gov)

It will be in the May 29 edition.  
Thank you.  
Cindy



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

May 22, 2012

Via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Salt Lake Tribune  
P. O. Box 45838  
Salt Lake City, UT 84145

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing for **account #9001402352** to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure

**From:** "Fultz, Mark" <naclegal@mediaoneutah.com>  
**To:** <jsweet@utah.gov>  
**Date:** 5/22/2012 2:32 PM  
**Subject:** Proof for Notice of Agency Action  
**Attachments:** OrderConf.pdf

AD# 794885  
Run SL Trib 5/25/12  
Cost \$331.25  
Please advise of any changes  
Thank You  
Ken

## Order Confirmation for Ad #0000794885-01

<b>Client</b>	DIV OF OIL-GAS & MINING	<b>Payor Customer</b>	DIV OF OIL-GAS & MINING
<b>Client Phone</b>	801-538-5340	<b>Payor Phone</b>	801-538-5340
<b>Account#</b>	[REDACTED]	<b>Payor Account</b>	[REDACTED]
<b>Address</b>	1594 W NORTH TEMP #1210, P.O. BOX 145801 SALT LAKE CITY, UT 84114 USA	<b>Payor Address</b>	1594 W NORTH TEMP #1210, P.O. BOX SALT LAKE CITY, UT 84114
<b>Fax</b>	801-359-3940	<b>Ordered By</b>	<b>Acct. Exec</b>
<b>Email</b>	earlenerussell@utah.gov	Jean	kstowe

<b>Total Amount</b>	<b>\$331.25</b>			
<b>Payment Amt</b>	<b>\$0.00</b>			
<b>Amount Due</b>	<b>\$331.25</b>	<b>Tear Sheets</b>	<b>Proofs</b>	<b>Affidavits</b>
		0	0	1
<b>Payment Method</b>		<b>PO Number</b>	Newfield Prod UIC-392	
<b>Confirmation Notes:</b>				
<b>Text:</b>	Jean			

<b>Ad Type</b>	<b>Ad Size</b>	<b>Color</b>
Legal Liner	3.0 X 87 Li	<NONE>

<b>Product</b>	<b>Placement</b>	<b>Position</b>
Salt Lake Tribune::	Legal Liner Notice - 0998	Public Meeting/Hear-ing Notices
<b>Scheduled Date(s):</b>	05/25/2012	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
sltrib.com::	Legal Liner Notice - 0998	Public Meeting/Hear-ing Notices
<b>Scheduled Date(s):</b>	05/25/2012	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
utahlegals.com::	utahlegals.com	utahlegals.com
<b>Scheduled Date(s):</b>	05/25/2012	

## Order Confirmation for Ad #0000794885-01

Ad Content Proof Actual Size

# Order Confirmation for Ad #0000794885-01

Ad Content Proof 135%

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-392

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 12, 13, 15, 17, 19, 20, 21, 22, 23, 24, AND 25, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.  
Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17th Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

Greater Monument Butte Unit:

Monument Federal 22-12J well located in SE/4 NW/4, Section 12, Township 9 South, Range 16 East

API 43-013-15796

Federal 5-13-9-16 well located in SW/4 NW/4, Section 13, Township 9 South, Range 16 East

API 43-013-32658

Federal 13-15-9-16 well located in SW/4 SW/4, Section 15, Township 9 South, Range 16 East

API 43-013-33136

Federal 7-17-9-16 well located in SW/4 NE/4, Section 17, Township 9 South, Range 16 East

API 43-013-33030

Federal 1-19-9-16 well located in NE/4 NE/4, Section 19, Township 9 South, Range 16 East

API 43-013-33062

Federal 5-19-9-16 well located in SW/4 NW/4, Section 19, Township 9 South, Range 16 East

API 43-013-33174

Federal 1-20-9-16 well located in NE/4 NE/4, Section 20, Township 9 South, Range 16 East

API 43-013-33066

Federal 3-20-9-16 well located in NE/4 NW/4, Section 20, Township 9 South, Range 16 East

API 43-013-33067

Federal 5-20-9-16 well located in SW/4 NW/4, Section 20, Township 9 South, Range 16 East

API 43-013-33104

Federal 9-20-9-16 well located in NE/4 SE/4, Section 20, Township 9 South, Range 16 East

API 43-013-33068

Federal 9-21-9-16 well located in NE/4 SE/4, Section 21, Township 9 South, Range 16 East

API 43-013-33145

Monument Federal 31-21-9-16Y well located in NW/4 NE/4, Section 21, Township 9 South, Range 16 East

API 43-013-31726

Federal 1-22-9-16 well located in NE/4 NE/4, Section 22, Township 9 South, Range 16 East

API 43-013-32612

Federal 7-22-9-16 well located in SW/4 NE/4, Section 22, Township 9 South, Range 16 East

API 43-013-33027

Federal 3-23-9-16 well located in NE/4 NW/4, Section 23, Township 9 South, Range 16 East

API 43-013-33176

Federal 11-23-9-16 well located in NE/4 SW/4, Section 23, Township 9 South, Range 16 East

API 43-013-33178

Federal 15-23-9-16 well located in SW/4 SE/4, Section 23, Township 9 South, Range 16 East

API 43-013-33182

Federal 3-24-9-16 well located in NE/4 NW/4, Section 24, Township 9 South, Range 16 East

API 43-013-33084

Federal 15-24-9-16 well located in SW/4 SE/4, Section 24, Township 9 South, Range 16 East

API 43-013-33344

Federal 21-25Y well located in NE/4 NW/4, Section 25, Township 9 South, Range 16 East

API 43-013-31394

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Greer River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 22nd day of May, 2012.

STATE OF UTAH

DIVISION OF OIL, GAS & MINING

/s/Brad Hill

Permitting Manager

794885

UPAXLP



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

August 15, 2012

Newfield Production Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

Subject: Greater Monument Butte Unit Well: Federal 1-20-9-16, Section 20, Township 9 South, Range 16 East, SLBM, Duchesne County, Utah, API Well # 43-013-33066

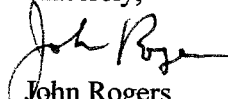
Gentlemen:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Newfield Production Company.
3. A casing\tubing pressure test shall be conducted prior to commencing injection.
4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.
5. The top of the injection interval shall be limited to a depth no higher than 3,939 feet in the Federal 1-20-9-16 well.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Mark Reinbold at 801-538-5333 or Brad Hill at 801-538-5315.

Sincerely,

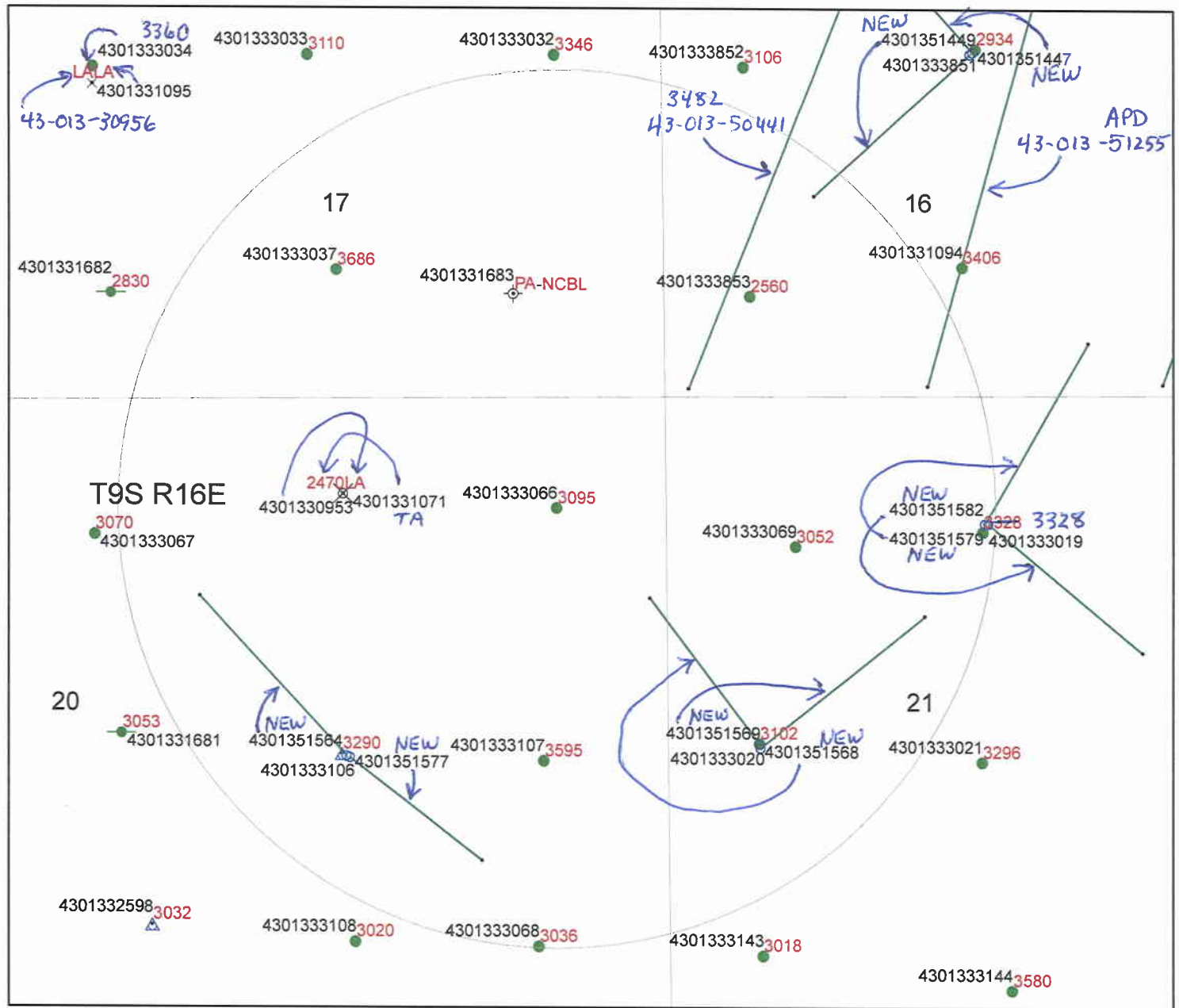
  
John Rogers  
Associate Director

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
SITLA  
Duchesne County  
Newfield Production Company, Myton  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC





Cement Bond Tops  
FEDERAL 1-20-9-16  
API #43-013-33066  
UIC 392.7

## Legend

Buffer\_of\_SGID93\_ENERGY\_DNROilGasWells\_78  
SGID93\_ENERGY.DNROilGasWells

SGID93.ENERGY.DNROilGasWells

GIS\_STAT\_TYPE

○ APD

⊙ DRL

⚡ GIW

○<sub>os</sub> GSW

× LA

○ LOC

● OPS

⊙ PA

⊙ PGW

● POW

▲ RET

⊙ SGW

— SOW

⊗ TA

○ TW

⊙ WDW

▲ WIW

● WSW

⊙

SGID93.BOUNDARIES.Counties

• SGID93.ENERGY.DNROilGasWells\_HDBottom

— SGID93.ENERGY.DNROilGasWells\_HDPath

• Wells-CbItopsMaster07\_06\_12

0 0.05 0.1 0.2 0.3 0.4 Miles



1870calc = approx cement top calculated from well completion report

**DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT  
STATEMENT OF BASIS**

**Applicant:** Newfield Production Company      **Well:** Federal 1-20-9-16

**Location:** 20/9S/16E      **API:** 43-013-33066

**Ownership Issues:** The proposed well is located on BLM land. The well is located in the Greater Monument Butte Unit. Lands in the one-half mile radius of the well are administered by the BLM and the State of Utah. The Federal Government and the State of Utah are the mineral owners within the area of review (AOR). Newfield and other various individuals hold the leases in the unit. Newfield has provided a list of all surface, mineral and lease holders in the half-mile radius. Newfield is the operator of the Greater Monument Butte Unit. Newfield has submitted an affidavit stating that all owners and interest owners have been notified of their intent.

**Well Integrity:** The proposed well has surface casing set at 324 feet and has a cement top at the surface. A 5½ inch production casing is set at 6,029 feet. A cement bond log demonstrates adequate bond in this well up to about 3,095 feet. A 2 7/8 inch tubing with a packer will be set at 4,110 feet. Higher perforations will be opened at a later date. A mechanical integrity test will be run on the well prior to injection. On the basis of surface locations, there are 8 producing wells, 1 injection well, 1 temporarily abandoned well, and 1 P/A well in the AOR. In addition, there is 1 horizontal producing well with a surface location outside the AOR and a bottom hole location inside the AOR. There is also an approved surface location outside the AOR from which a horizontal well will be drilled to a bottom hole location inside the AOR. Finally, there are two proposed locations for directional wells with surface locations inside the AOR and bottom hole locations outside and one proposed location for a directional well with a surface location outside the AOR and bottom hole location inside. All of the existing wells have evidence of adequate casing and cement for the proposed injection interval.

**Ground Water Protection:** As interpreted from the Utah Geological Survey's DOE Project-Uinta Basin Water Draft Map (Paul B. Anderson, December 2, 2011), the base of moderately saline water (3000-10,000 mg/l TDS) is at a depth of approximately 2700 feet. Injection shall be limited to the interval between 3,939 feet and 5,958 feet in the Green River Formation. Information submitted by Newfield indicates that the fracture gradient for the 1-20-9-16 well is 0.81 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 1,769 psig. The requested maximum pressure is 1,769 psig. The anticipated average injection pressure is 1100 psig. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Federal 1-20-9-16**  
**page 2**

**Oil/Gas& Other Mineral Resources Protection:** The Board of Oil, Gas & Mining approved the Greater Monument Butte Unit on December 1, 2009. Correlative rights issues were addressed at this time. Previous reviews in this area indicate that other mineral resources in the area have been protected or are not at issue.

**Bonding:** Bonded with the BLM

**Actions Taken and Further Approvals Needed:** A notice of agency action has been sent to the Salt Lake Tribune and the Uinta Basin Standard. A casing/tubing pressure test will be required prior to injection. It is recommended that approval of this application be granted.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Mark Reinbold

Date 8/10/2012

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018			
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  			
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)			
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16			
<b>4. LOCATION OF WELL</b> FOOTAGES AT SURFACE: 0617 FNL 0652 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000			
<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE		<b>COUNTY:</b> DUCHESNE			
<b>STATE:</b> UTAH					
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/12/2012  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input checked="" type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input checked="" type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input checked="" type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input checked="" type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>			
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> The subject well has been converted from a producing oil well to an injection well on 10/09/2012. On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test.					
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto		<b>PHONE NUMBER</b> 435 646-4874			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Water Services Technician			
<b>DATE</b> 10/19/2012					

Sundry Number: 31191 API Well Number: 43013330660000

## Mechanical Integrity Test Casing or Annulus Pressure Test

Newfield Production Company

Rt. 3 Box 3630  
Myton, UT 84052  
435-646-3721

Witness: \_\_\_\_\_ Date 10/12/10 Time 11:30 am pm  
Test Conducted by: Riley Bugh  
Others Present: \_\_\_\_\_

Well: <u>Federal 1-20-9-16</u>	Field: <u>Monument B-H</u>
Well Location: <u>Federal 1-20-9-16</u>	API No: <u>4301333066</u>

<u>Time</u>	<u>Casing Pressure</u>	
0 min	<u>1575</u>	psig
5	<u>1575</u>	psig
10	<u>1575</u>	psig
15	<u>1575</u>	psig
20	<u>1575</u>	psig
25	<u>1575</u>	psig
30 min	<u>1575</u>	psig
35	_____	psig
40	_____	psig
45	_____	psig
50	_____	psig
55	_____	psig
60 min	_____	psig

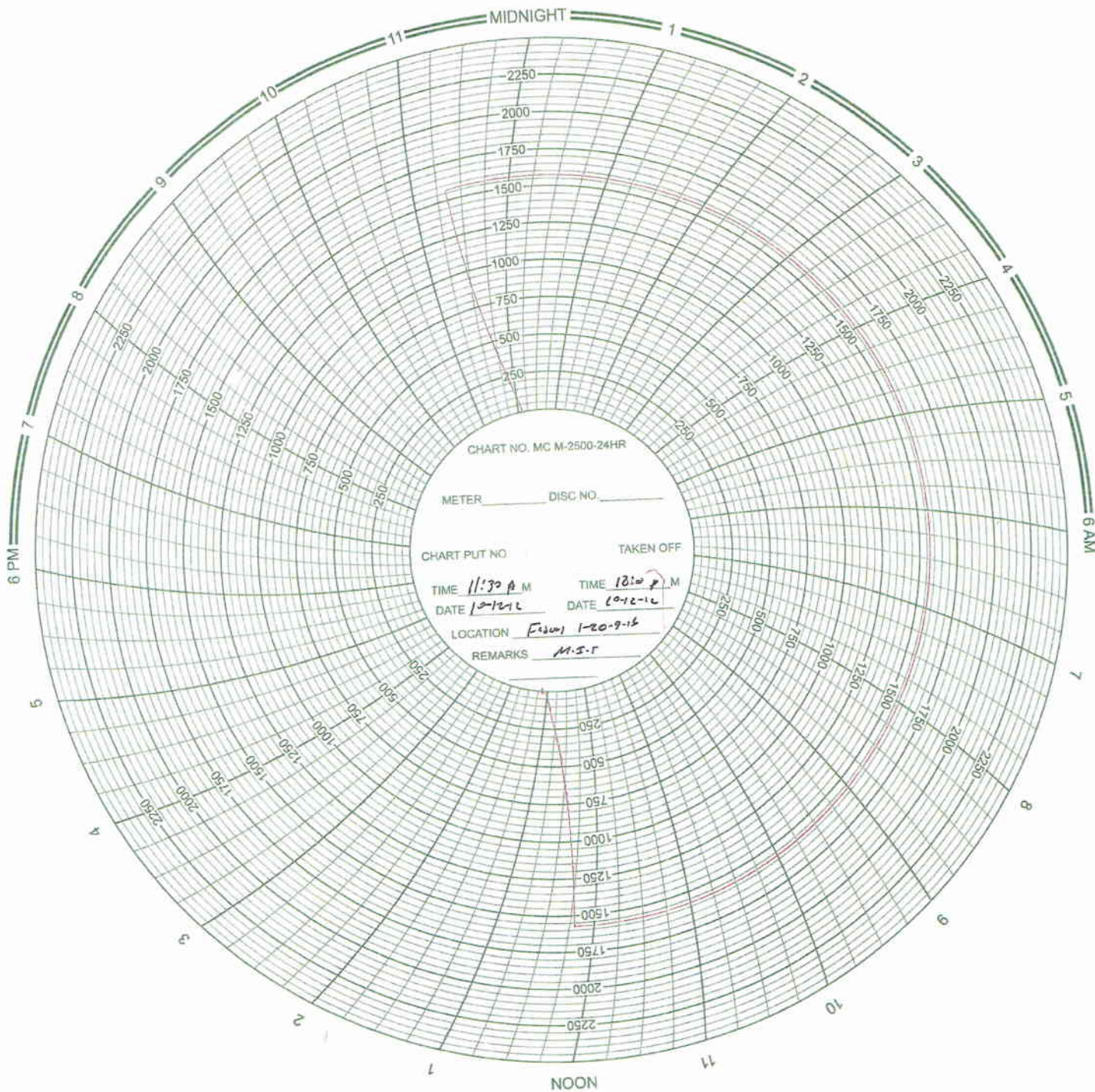
Tubing pressure: 150 psig

Result: Pass Fail

Signature of Witness: \_\_\_\_\_

Signature of Person Conducting Test: Riley Bugh

Sundry Number: 31191 API Well Number: 43013330660000



## Daily Activity Report

Format For Sundry  
FEDERAL 1-20-9-16  
8/1/2012 To 12/30/2012

10/4/2012 Day: 1

Conversion

Nabors #1608 on 10/4/2012 - MIRUSU. LD rods. Pressure test tbg. - RU pumping unit. Unseat rod pump. Flush tbg w/ 40 BW @ 250°. - Soft seat rods & fill tbg w/ 12 BW. Pressure tbg to 3000 psi. Pressure was dropping off slow. Pressure tbg to 5000 psi attempting to open hole bigger w/o success. - LD 215- 3/4" rods, ponies & polished rod on trailer. Flush tbg & rods w/ additional 20 BW during TOH. - X-over for tbg equipment. Tie drill line back single line. ND wellhead. TA was not set. NU BOPs. RU rig floor. - Flush tbg w/ 30 BW. Drop standing valve down tbg. Fill tbg & pressure test tbg to 3000 psi (good test). - RU sandline. RIH w/ fishing tool on sandline & retrieve. - MIRUSU. Hot oiler had pumped 60 bbls water down csg @ 250°.

**Daily Cost:** \$0

**Cumulative Cost:** \$8,328

10/5/2012 Day: 2

Conversion

Nabors #1608 on 10/5/2012 - TOH w/ tbg (talleying, breaking collars & applying Liquid-Oring to threads). LD 48- jts tbg on trailer. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'. - On standby waiting for possible frac schedule change. - On standby waiting for possible frac schedule change. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - SWIFN. RU pump & pump lines. - SWIFN. RU pump & pump lines. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perforators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perforators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - Tools won't test. Move pkr. Still won't test. - Tools won't test. Move pkr. Still won't test. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'.

**Daily Cost:** \$0

**Cumulative Cost:** \$16,122

10/8/2012 Day: 4

Conversion

Nabors #1608 on 10/8/2012 - Frac D-1 Sands, FB, CO top of RBP and retrieve RBP. POOH. RBIH w/injection string. - Waith for acid truck from Multi-chem. - SWIFN. - Spot in pipe trailer and start LD pipe. LD 95 jts of 2 7/8" N-80 tbg. - Had to wair on semi trailer to LD pipe. Well still flowing after releasing the plug. - Release pkr, RD frac valve, RIH to latch on to RBP. Had to CO 15' of fill. Circ clean and released plug. - Open tbg up to FB on a 20 choke. Died down

to 0 after 20 bbls. - Filled backside w/12 bbls and PU to 500 psi. Frac D-1 sands 4636-39'. RD frac crew, called runners for the tbg trailer. - Spot in frac crew and RU lines. Set pkr @ 4614'. - Safety Meeting, discussed location hazards, recent NFX incidents, job procedure, emergency plans, meeting point. - Move plug down to 4670' and plug up to 4662'. Pressure test plug to 4000 PSI. Good test. - RU Muti-chem and pump 2 Bbls acid. Pump 24 Bbls behind HCL to spot @ 4640'. Move PKR above perfs to 4608' and start breaking dwn zones. BD @ 3700 psi. Increased rate to .5 Bbl and pumped 5 bbls @ 1500 psi. shut down and pressurebled down to zero in less then a minute. - Waiting on frac crew.

**Daily Cost:** \$0

**Cumulative Cost:** \$84,384

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**10/9/2012 Day: 5**

**Conversion**

Nabors #1608 on 10/9/2012 - TIH w/ pkr. Test tbg. Set pkr. Test casing. RDMOSU. Well ready for MIT. - Held safety meeting & discussed JSA's. TIH w/ XN nipple, 2-3/8" x 4' pup jt, XO sub (2-7/8" to 2-3/8"), "HD" pkr, On/Off tool, PSN, 133 jts 2-7/8" tbg. - Tighten well head bolts. Test casing to 1400 psi. Took 2 attempts. - Pump 20 bbls fluid. Drop STD vlve. Fill tbg w/ 12 bbls. Test tbg to 3000 psi for 30 min, took 3 attempts. - RDMOSU. Well ready for MIT. - Pump 50 bbls pkr fluid. Set pkr w/ 15,000#'s tension @ 4107' CEO. 4117' EOT. - Single line rig. RD BOP's. Hang tbg in well on 6' pup joint. - RU sand line & fish std valve.

**Daily Cost:** \$0

**Cumulative Cost:** \$113,603

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**10/16/2012 Day: 6**

**Conversion**

Rigless on 10/16/2012 - Conduct initial MIT - On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test. **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$190,137

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**Pertinent Files: Go to File List**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>																				
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018																				
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)																				
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16																				
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>9. API NUMBER:</b> 43013330660000																				
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE																				
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		<b>COUNTY:</b> DUCHESNE																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">TYPE OF SUBMISSION</th> <th colspan="3">TYPE OF ACTION</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> <b>NOTICE OF INTENT</b>            Approximate date work will start:         </td> <td style="vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER         </td> <td style="vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input checked="" type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <span style="border: 1px solid black; padding: 2px;">Put on Injection</span> </td> </tr> <tr> <td style="vertical-align: top;"> <input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b>            Date of Work Completion:            11/13/2012         </td> <td></td> <td></td> <td></td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> <b>SPUD REPORT</b>            Date of Spud:         </td> <td></td> <td></td> <td></td> </tr> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> <b>DRILLING REPORT</b>            Report Date:         </td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			TYPE OF SUBMISSION	TYPE OF ACTION			<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <span style="border: 1px solid black; padding: 2px;">Put on Injection</span>	<input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion: 11/13/2012				<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:				<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			
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<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>  <div style="text-align: center;">         The above reference well was put on injection at 2:30 PM on          11/13/2012.       </div> <div style="text-align: right; margin-top: 20px;"> <b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          November 19, 2012</b> </div>																						
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto		<b>PHONE NUMBER</b> 435 646-4874																				
<b>SIGNATURE</b> N/A		<b>TITLE</b> Water Services Technician																				
<b>DATE</b> 11/15/2012																						

# FEDERAL 1-20-9-16

Spud Date: 05/16/07

Put on Production: 07/25/07

GL: 6038' KB: 6050'

## Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts. (312.36')

DEPTH LANDED: 324.21' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 137 jts. (6015.83')

DEPTH LANDED: 6029.08' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.

CEMENT TOP: 60'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 133 jts (4089.7')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 41013.7' KB

ON/OFF TOOL AT: 4102.8'

ARROW #1 PACKER CE AT: 4107.75'

XO 2-3/8 x 2-7/8 J-55 AT: 4111.6'

TBG PUP 2-3/8 J-55 AT: 4112.1'

X/N NIPPLE AT: 4116.5'

TOTAL STRING LENGTH: EOT @ 4118'

### FRAC JOB

07/19/07 5526-5544'

#### **Frac CP1 sands as follows:**

40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.

07/19/07 5124-5138'

#### **Frac LODC sands as follows:**

60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.

07/19/07 4780-4795'

#### **Frac C sands as follows:**

60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.

07/19/07 4680-4694'

#### **Frac D2 sands as follows:**

79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal.

07/20/07 4160-4167'

#### **Frac GB6 sands as follows:**

25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal.

1/26/09

**Pump Change.** Updated r & t details.

10/08/12 4636-4639'

#### **Frac D1 sands as follows:**

12260# 20/40 sand in 178 bbls Lightning 17 frac fluid.

10/09/12

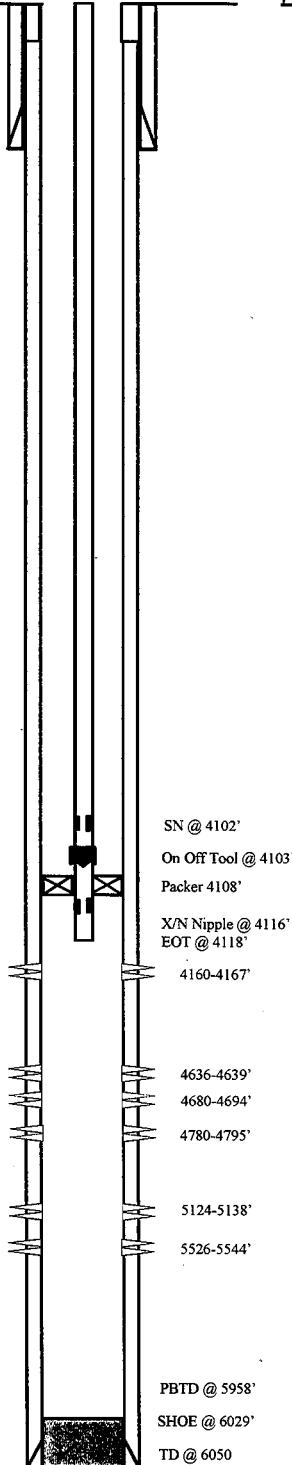
**Convert to Injection Well**

10/12/12

**Conversion MIT Finalized** - update tbg detail

### PERFORATION RECORD

07/10/07	5526-5544'	4 JSPF	72 holes
07/19/07	5124-5138'	4 JSPF	56holes
07/19/07	4780-4795'	4 JSPF	60 holes
07/19/07	4680-4694'	4 JSPF	56 holes
07/19/07	4160-4167'	4 JSPF	28 holes
10/05/12	4636-4639'	3 JSPF	9 holes



**NEWFIELD**



**FEDERAL 1-20-9-16**

617'FNL & 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

LCN 10/18/12



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## UNDERGROUND INJECTION CONTROL PERMIT


Cause No. UIC-392

**Operator:** Newfield Production Company  
**Well:** Federal 1-20-9-16  
**Location:** Section 20, Township 9 South, Range 16 East  
**County:** Duchesne  
**API No.:** 43-013-33066  
**Well Type:** Enhanced Recovery (waterflood)

### Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on August 15, 2012.
2. Maximum Allowable Injection Pressure: 1,769 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (3,939' – 5,958')
5. Any subsequent wells drilled within a ½ mile radius of this well shall have production casing cement brought up to or above the top of the unitized interval for the Greater Monument Butte Unit.

Approved by:

  
John Rogers  
Associate Director

11-7-2012  
Date

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
SITLA  
Eric Sundberg, Newfield Production Company, Denver  
Newfield Production Company, Myton  
Duchesne County  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC\Newfield





February 17, 2006

State of Utah  
Division of Oil, Gas & Mining  
Attn: Diana Whitney  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: 1-19-9-16, 2-19-9-16, 3-19-9-16, 4-19-9-16,  
1-20-9-16, 3-20-9-16, 9-20-9-16, and 4-21-9-16.

Dear Diana:

Enclosed find APD's on the above referenced wells. The proposed Federal 1-19-9-16 is an Exception Location. Our Land Department will send you the required Exception Location Letter. If you have any questions, feel free to give either Shon Mckinnon or myself a call.

Sincerely,

Mandie Crozier  
Regulatory Specialist

mc  
enclosures

**RECEIVED**  
**FEB 21 2006**

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.  
UTU-52018

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No.  
Federal 1-20-9-16

9. API Well No.  
43-013-33066

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area  
NE/NE Sec. 20, T9S R16E

12. County or Parish  
Duchesne

13. State  
UT

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
Newfield Production Company

3a. Address  
Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)  
(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface NE/NE 617' FNL 652' FEL 573779X 40.021886  
At proposed prod. zone 4430334Y -110.135419

14. Distance in miles and direction from nearest town or post office\*  
Approximatley 15.2 miles southwest of Myton, Utah

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) Approx. 652' f/lease, NA' f/unit

16. No. of Acres in lease  
640.00

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. Approx. 1369'

19. Proposed Depth  
6040'

20. BLM/BIA Bond No. on file  
UTB000192

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
6038' GL

22. Approximate date work will start\*  
2nd Quarter 2006

23. Estimated duration  
Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
Mandie Crozier  
Title  
Regulatory Specialist

Name (Printed/Typed)  
Mandie Crozier

Date  
2/17/06

Approved by (Signature)  
Bradley G. Hill  
Title

Name (Printed/Typed)  
BRADLEY G. HILL  
ENVIRONMENTAL MANAGER  
Office

Date  
02-23-06

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

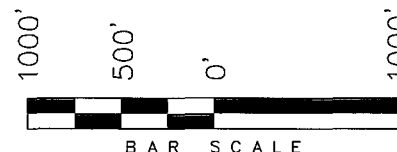
Federal Approval of this  
Action is Necessary

RECEIVED  
FEB 21 2006  
DIV. OF OIL, GAS & MINING

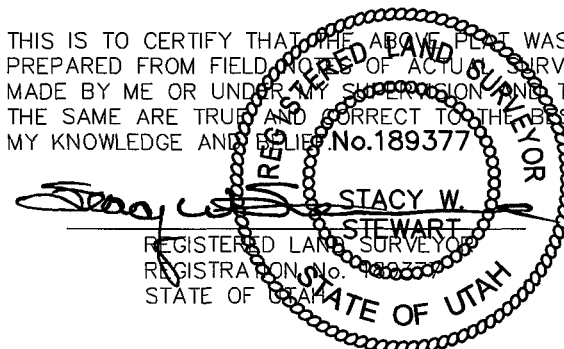
**T9S, R16E, S.L.B.&M.**

**NEWFIELD PRODUCTION COMPANY**

WELL LOCATION, 9 MILE 1-20-9-16,  
LOCATED AS SHOWN IN THE NE 1/4 NE  
1/4 OF SECTION 20, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.



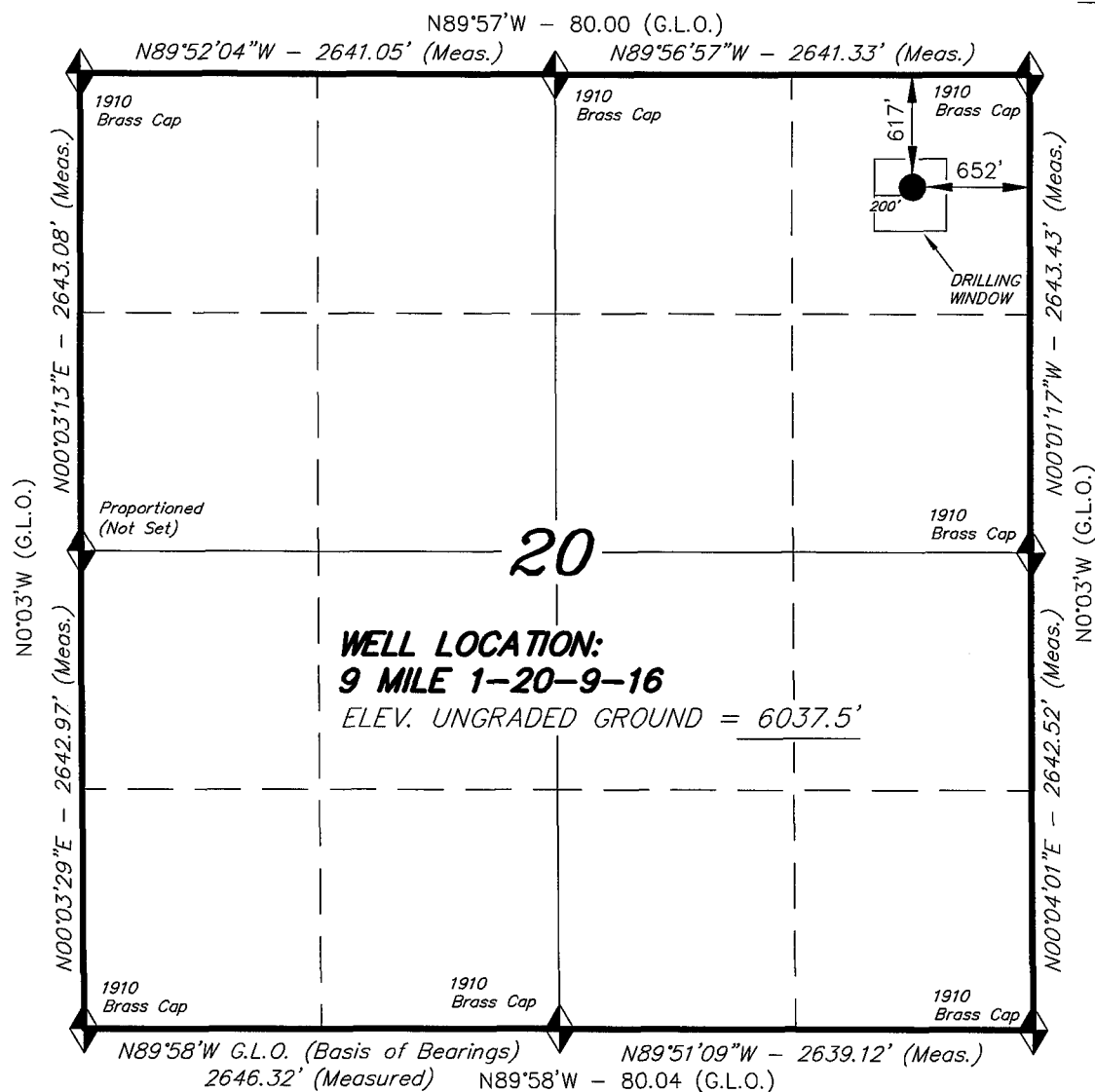
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377



**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 12-31-05	SURVEYED BY: C.M.
DATE DRAWN: 01-04-06	DRAWN BY: L.C.S.
REVISED:	SCALE: 1" = 1000'



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SW)

**9 MILE 1-20-9-16  
(Surface Location) NAD 83**  
 LATITUDE = 40° 01' 18.99"  
 LONGITUDE = 110° 08' 09.95"

NEWFIELD PRODUCTION COMPANY  
FEDERAL #1-20-9-16  
NE/NE SECTION 20, T9S, R16E  
DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	0' – 2600'
Green River	2600'
Wasatch	6040'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 2600' – 6040' - Oil

4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Please refer to the Monument Butte Field SOP. See Exhibit "C".

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

Please refer to the Monument Butte Field SOP.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

NEWFIELD PRODUCTION COMPANY  
FEDERAL #1-20-9-16  
NE/NE SECTION 20, T9S, R16E  
DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Federal #1-20-9-16 located in the NE 1/4 NE 1/4 Section 20, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.6 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southwesterly - 10.9 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly - 2.0 miles  $\pm$  to it's junction with an exiting road to the northeast; proceed northeasterly - 0.4 miles  $\pm$  to it's junction with the beginning of the proposed access road; proceed along the proposed access road - 1,570'  $\pm$  to the proposed well location.

2. PLANNED ACCESS ROAD

See Topographic Map "B" for the location of the proposed access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

All permanent surface equipment will be painted Carlsbad Canyon.  
Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

5. LOCATION AND TYPE OF WATER SUPPLY

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. SOURCE OF CONSTRUCTION MATERIALS

Please refer to the Monument Butte Field SOP.

7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #05-225, 7/13/05. Paleontological Resource Survey prepared by, Wade E. Miller, 11/10/05. See attached report cover pages, Exhibit "D".

For the Federal #1-20-9-16 Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed access road. **Refer to Topographic Map "B"**. The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed gas lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 6" gas gathering line, and a buried 3" poly fuel gas line. Both lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

Newfield Production Company requests 1,570' of disturbed area be granted in Lease UTU-52018 to allow for construction of the proposed water lines. It is proposed that the disturbed area will be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP.

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

**Golden Eagle:** Lease Notice Only.

### Reserve Pit Liner

A 12 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

### Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Crested Wheatgrass	<i>Agropyron Cristatum</i>	4 lbs/acre
Needle and Threadgrass	<i>Stipa Comata</i>	4 lbs/acre
Indian Ricegrass	<i>Oryzopsis Hymenoides</i>	4 lbs/acre

### Details of the On-Site Inspection

The proposed Federal #1-20-9-16 was on-sited on 11/3/05. The following were present; Shon Mckinnon (Newfeild Production), Melissa Hawk (Bureau of Land Management), and Amy Torres (Bureau of Landmanagement). Weather conditions were clear and ground cover was 100% open.

### 13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

#### Representative

Name: Shon Mckinnon  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

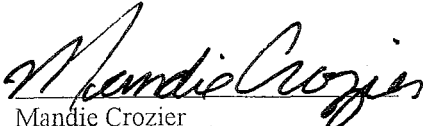
#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #1-20-9-16 NE/NE Section 20, Township 9S, Range 16E: Lease UTU-52018 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

2/17/06

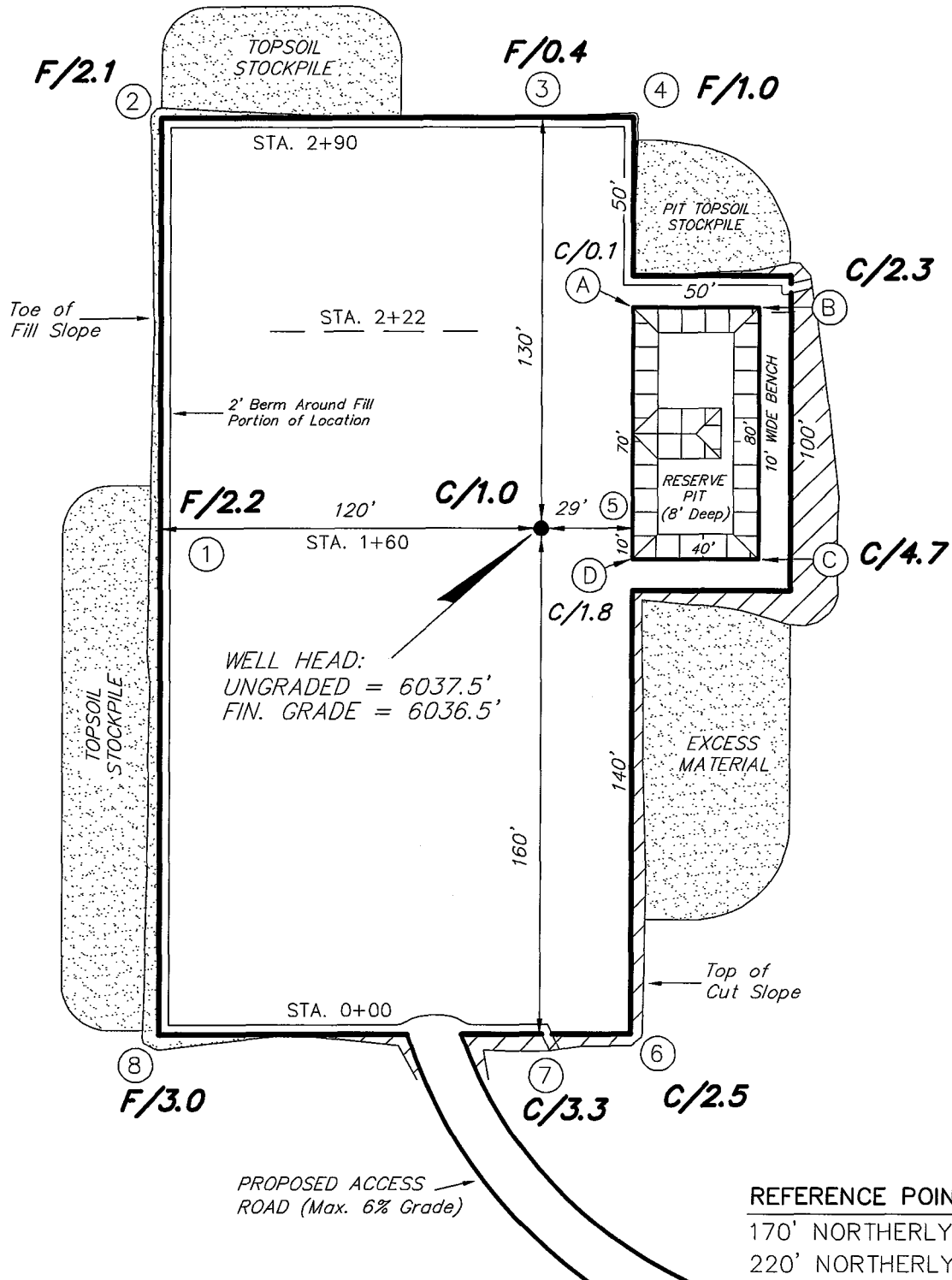
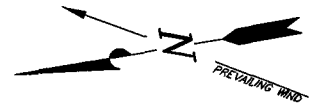
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

# NEWFIELD PRODUCTION COMPANY

9 MILE 1-20-9-16

Section 20, T9S, R16E, S.L.B.&M.



SURVEYED BY: C.M.

SCALE: 1" = 50'

DRAWN BY: L.C.S.

DATE: 01-09-06

Tri State  
Land Surveying, Inc.

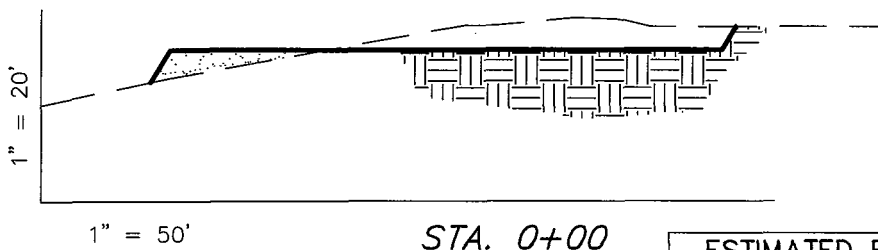
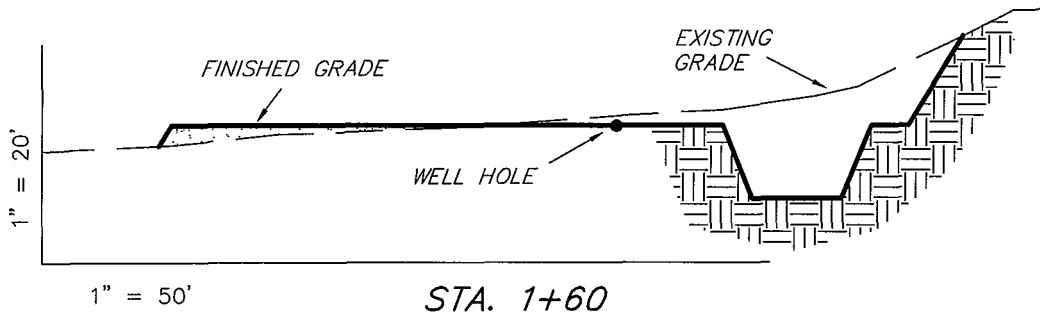
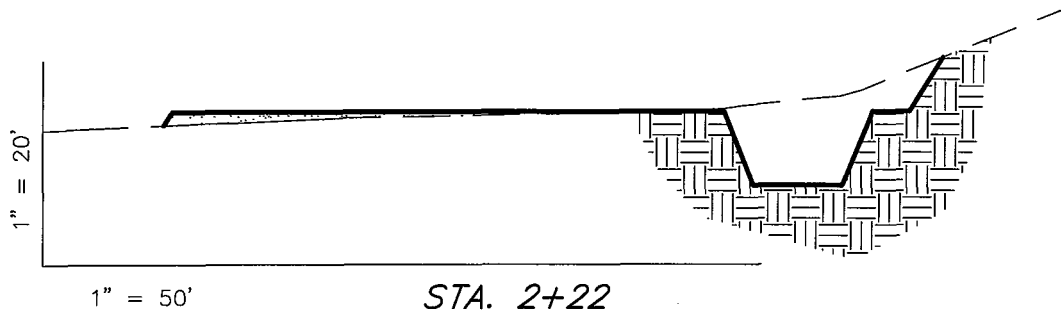
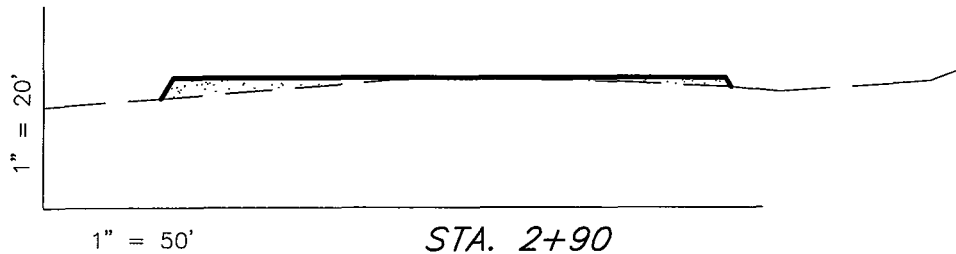
(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

9 MILE 1-20-9-16



NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	1,240	1,240	Topsoil is not included in Pad Cut	0
PIT	640	0		640
TOTALS	1,880	1,240	970	640

SURVEYED BY: C.M.

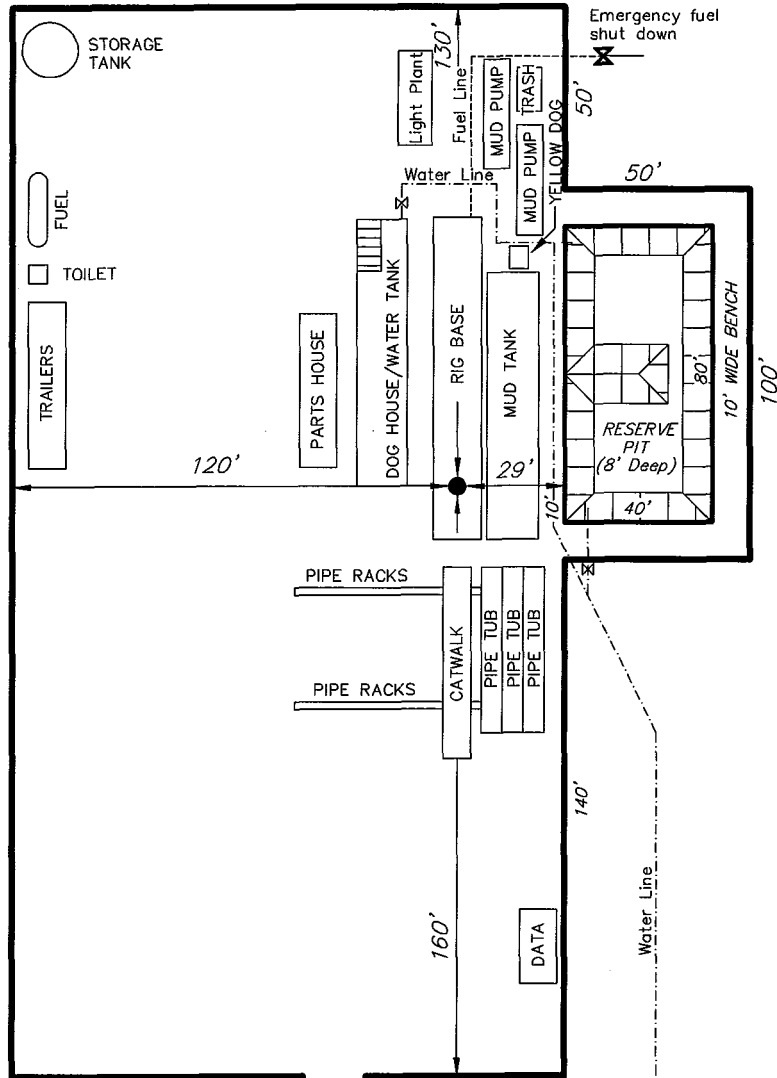
SCALE: 1" = 50'

DRAWN BY: L.C.S.

DATE: 01-09-06

**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

NEWFIELD PRODUCTION COMPANY  
TYPICAL RIG LAYOUT  
9 MILE 1-20-9-16



PROPOSED ACCESS ROAD (Max. 6% Grade)

SURVEYED BY: C.M.

SCALE:  $1'' = 50'$

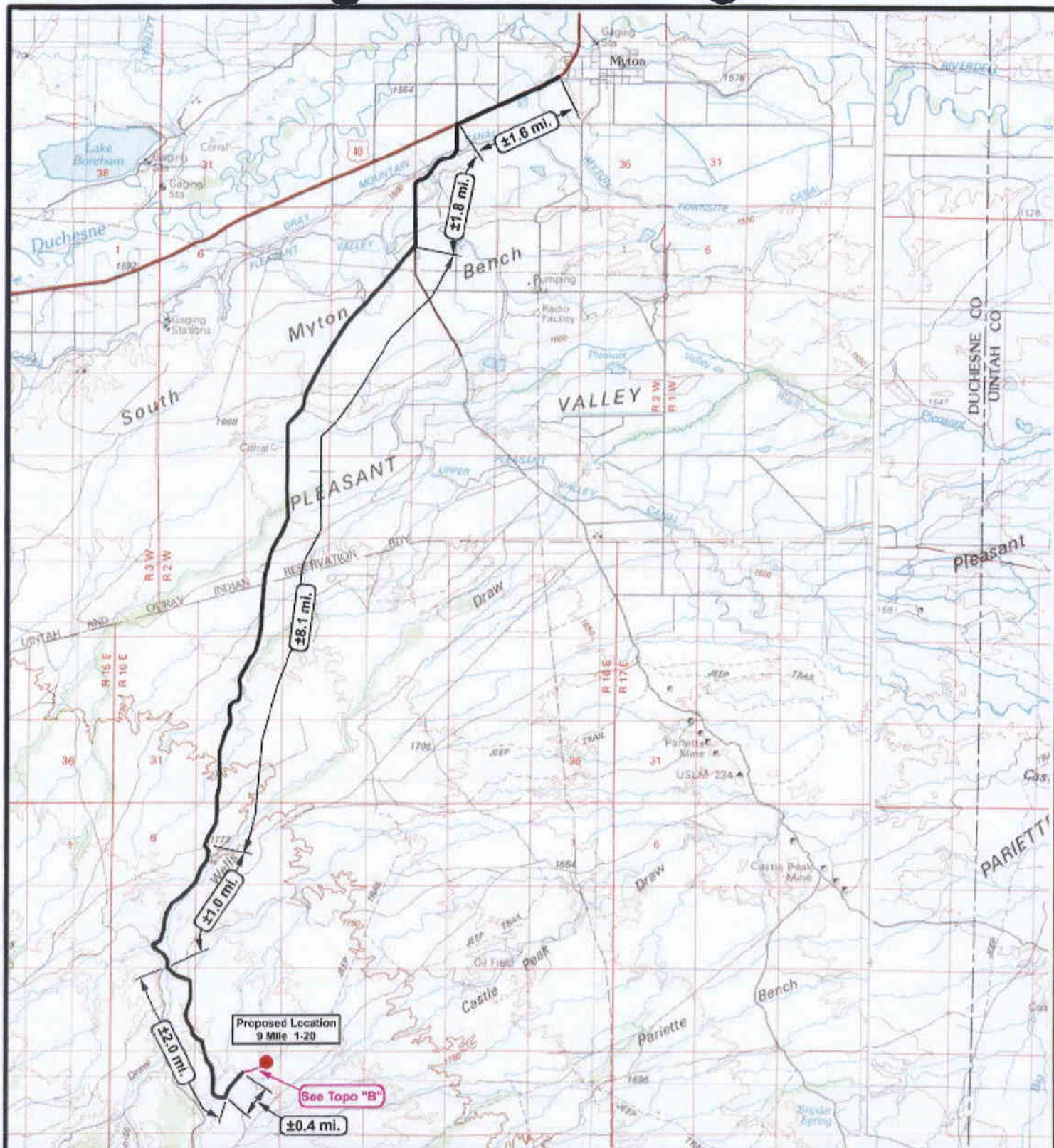
DRAWN BY: L.C.S.


DATE: 01-09-06

**Tri State** (4)  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UT

(435) 781-2501

180 NORTH VERNAL AVE. VERNAL, UTAH 84078





**NEWFIELD**  
Exploration Company

---

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**





**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

---

SCALE: 1 = 100,000  
DRAWN BY: mw  
DATE: 01-12-2006

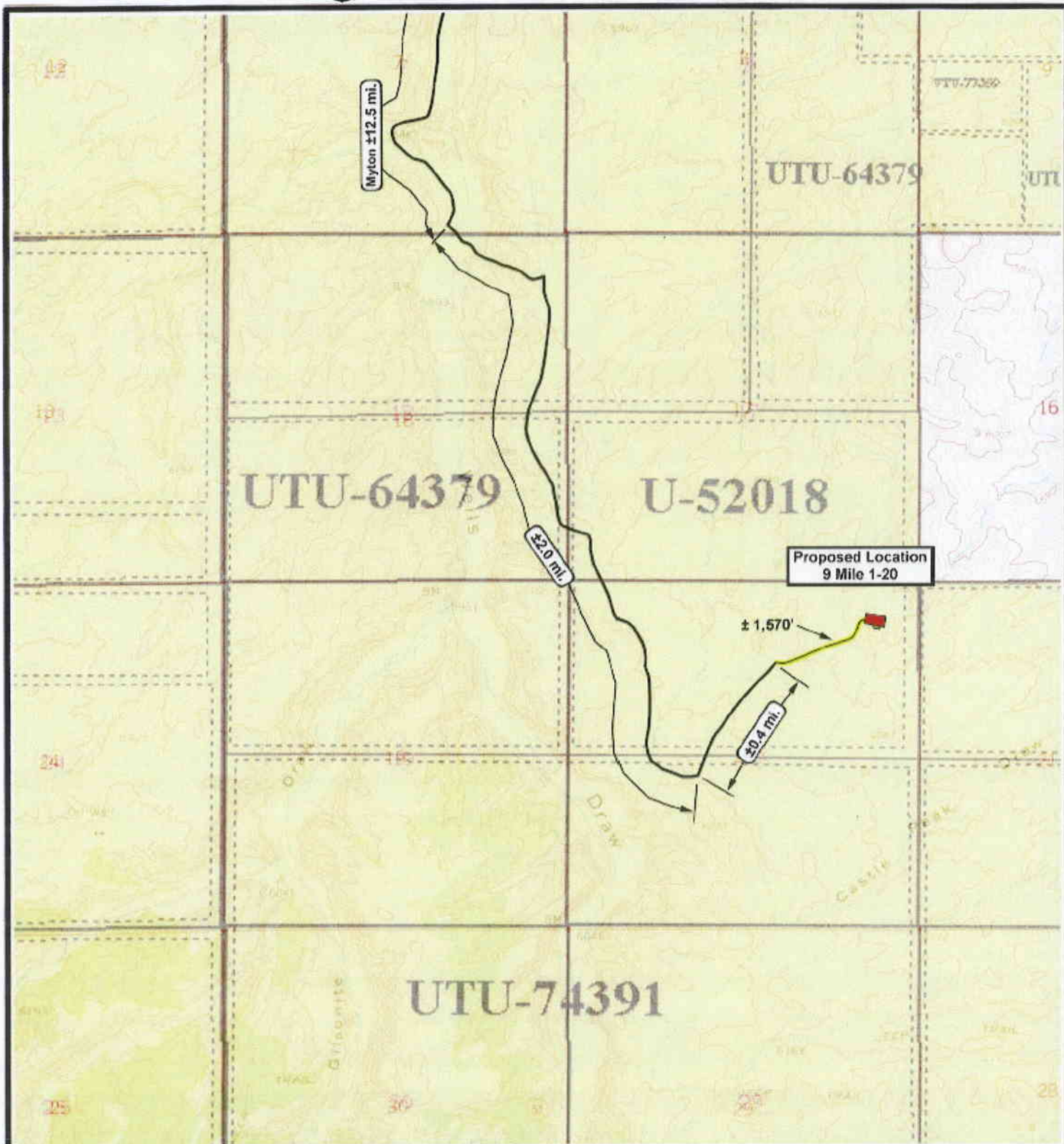
**Legend**

— Existing Road  
— Proposed Access

---

**TOPOGRAPHIC MAP**

**"A"**



**NEWFIELD**  
Exploration Company

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**



*Tri-State*  
*Land Surveying Inc.*  
(435) 781-2501  
180 North Vernal Ave., Vernal, Utah 84078

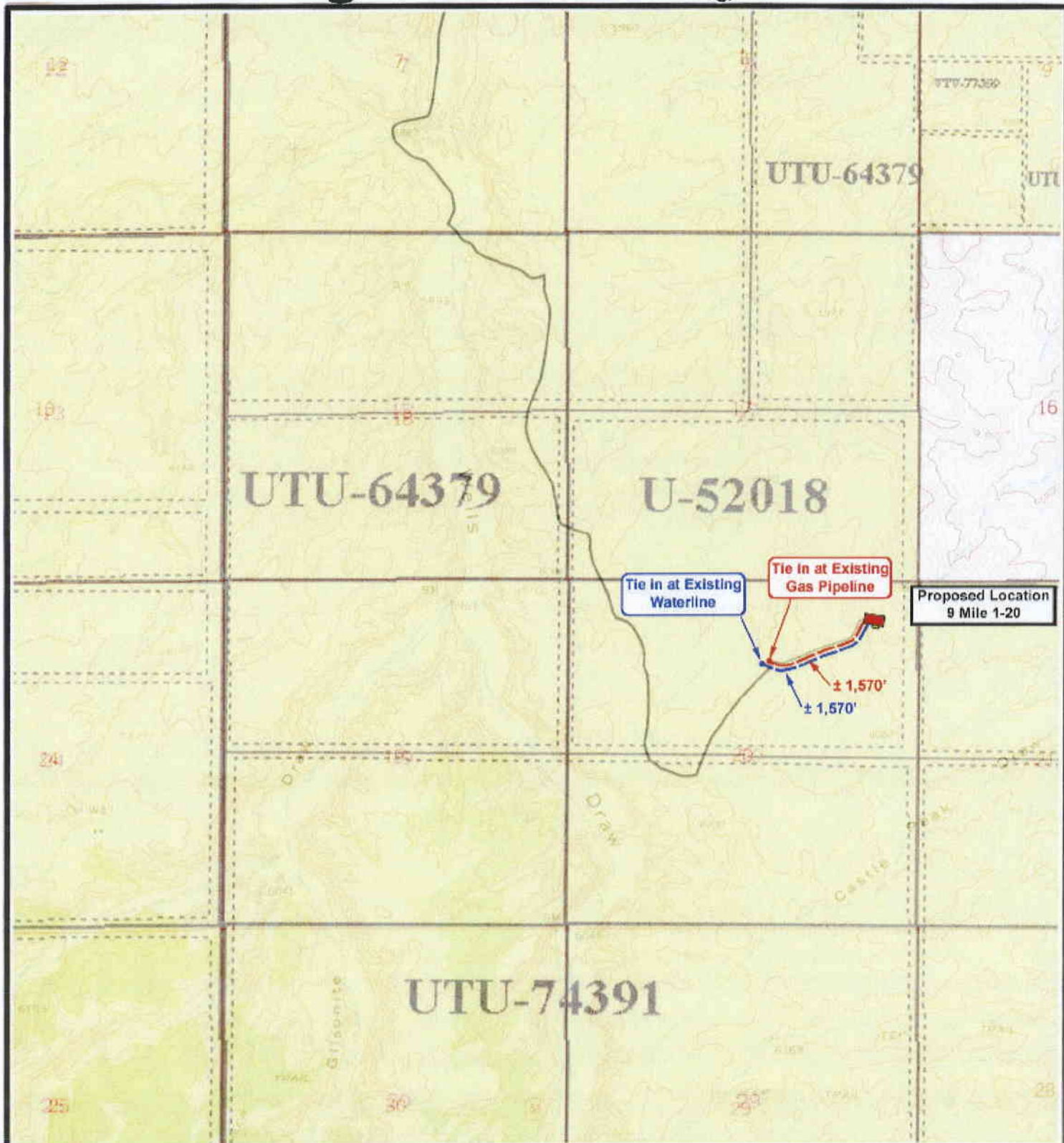
SCALE: 1" = 2000'  
DRAWN BY: mw  
DATE: 01-12-2006

**Legend**

Existing Road  
Proposed Access

TOPOGRAPHIC MAP

**"B"**



**NEWFIELD**  
Exploration Company

**9 Mile 1-20-9-16**  
**SEC. 20, T9S, R16E, S.L.B.&M.**



*Pai-State*  
*Land Surveying Inc.*  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'

DRAWN BY: mw

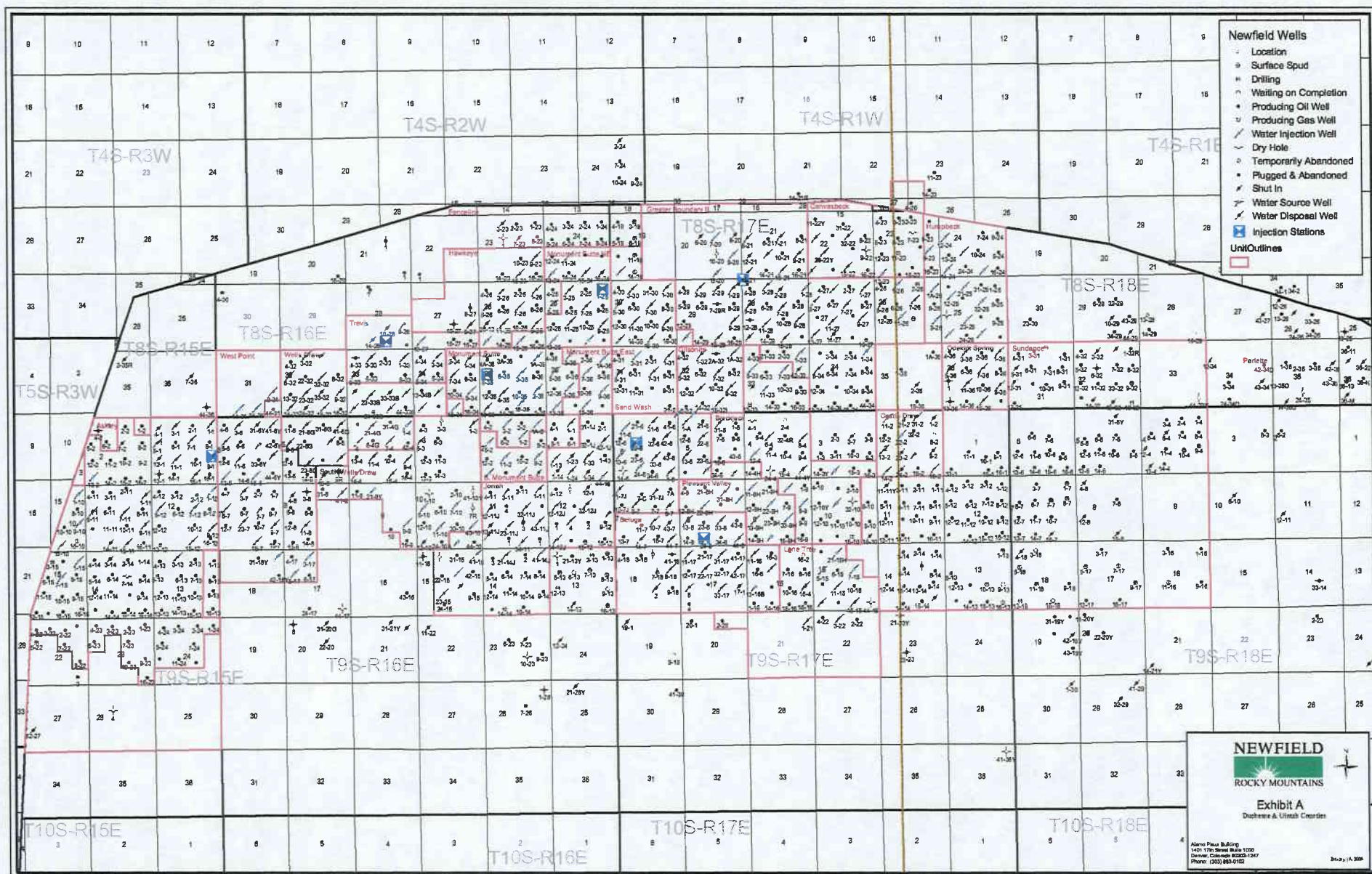
DATE: 01-12-2006

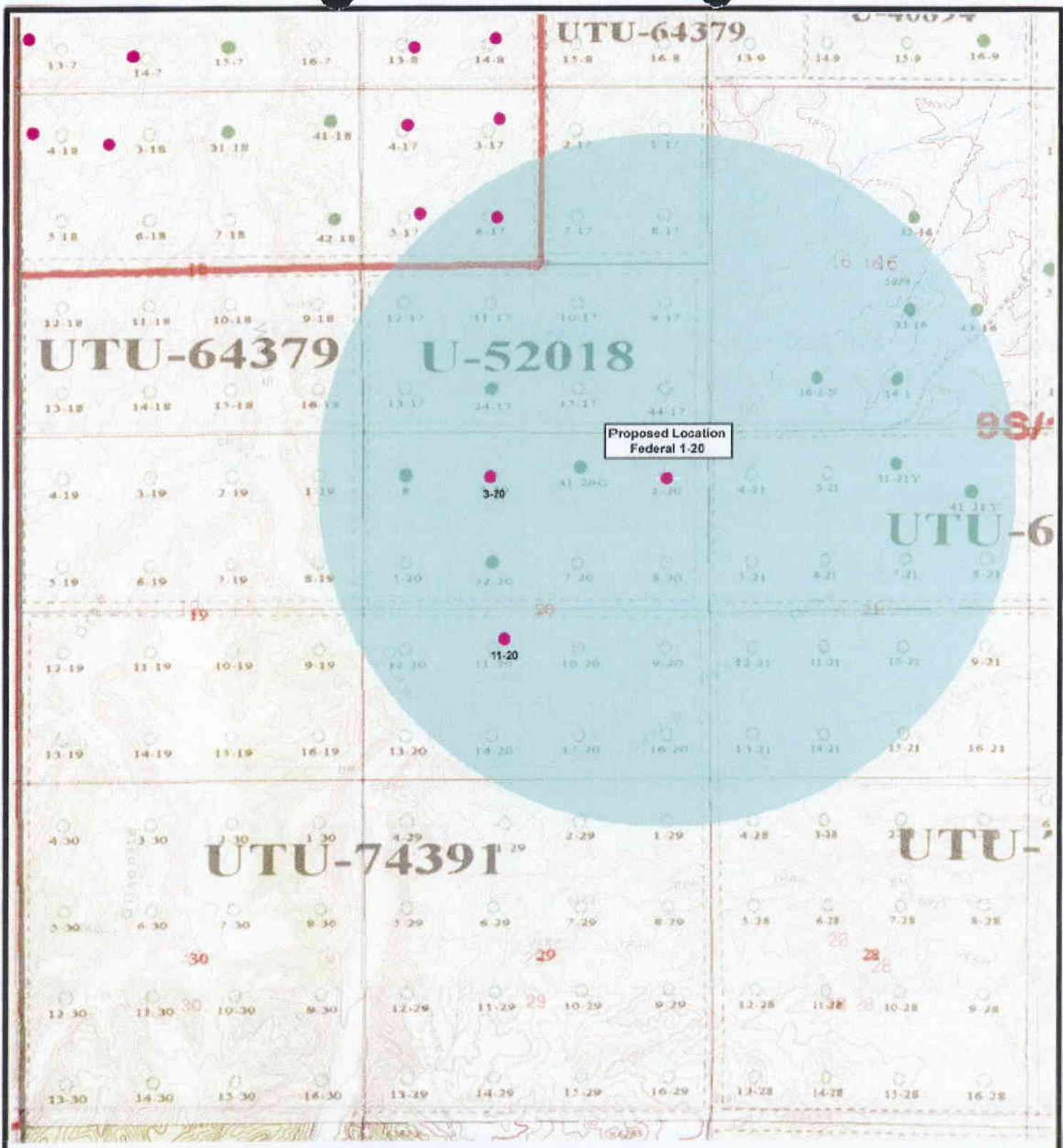
**Legend**




- Roads
- Proposed Gas Line
- Proposed Water Line

TOPOGRAPHIC MAP

**"C"**





 <p><b>NEWFIELD</b> Exploration Company</p>		 <p><b>Tri-State</b> Land Surveying Inc. (435) 781-2501 180 North Vernal Ave. Vernal, Utah 84078</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>● Proposed Location</li> <li>● One-Mile Radius</li> </ul>
<p><b>9 Mile 1-20-9-16</b> <b>SEC. 20, T9S, R16E, S.L.B.&amp;M.</b></p>		<p><b>SCALE:</b> 1" = 2,000' <b>DRAWN BY:</b> mw <b>DATE:</b> 01-12-2006</p>	<p><b>Exhibit "B"</b></p>

## 2-M SYSTEM

Blowout Prevention Equipment Systems

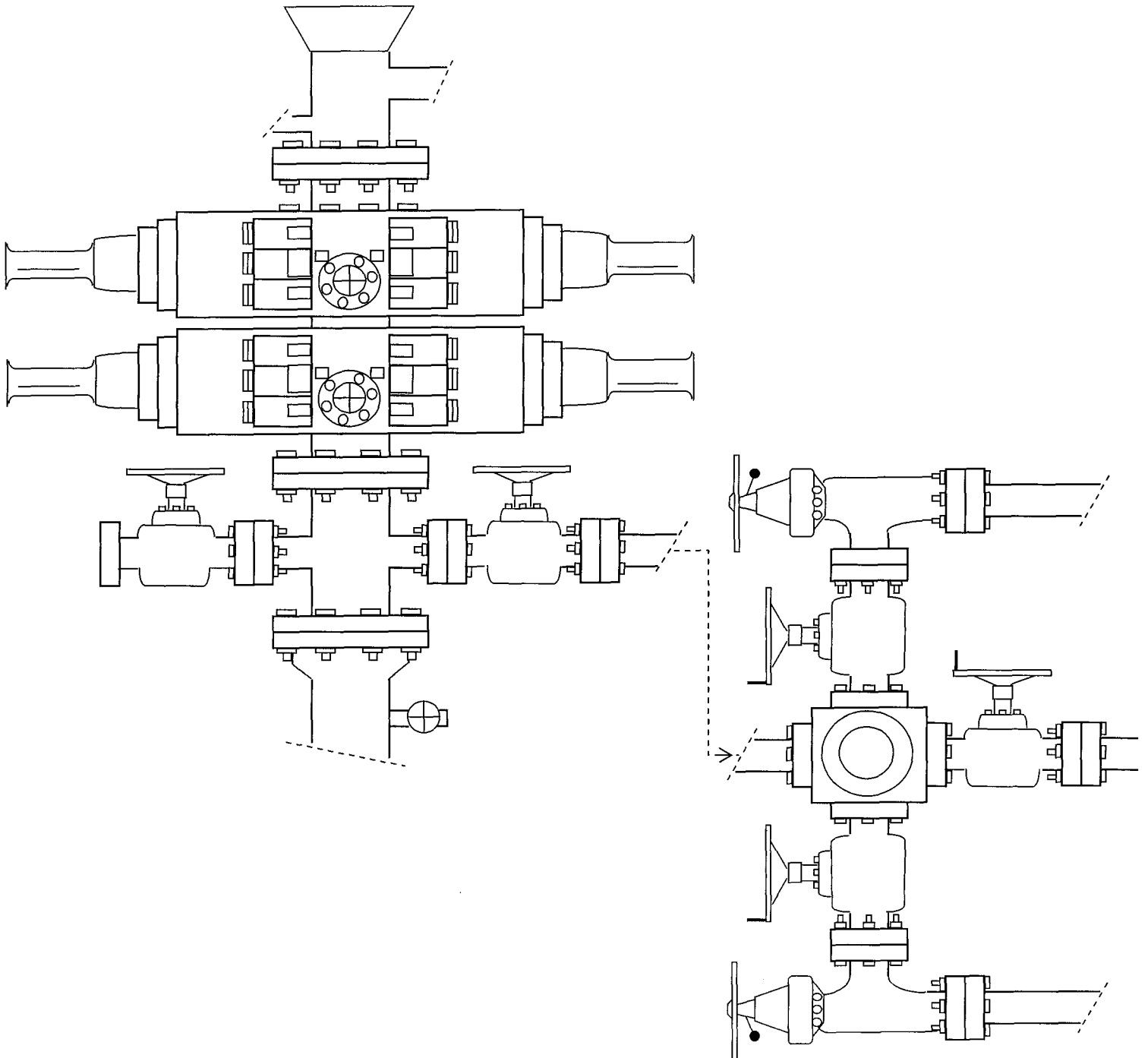


EXHIBIT C

Exhibit "D"  
Page 1 of 2

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S BLOCK PARCEL  
IN TOWNSHIP 9S, RANGE 16E, SECTION 19 AND 20,  
DUCHESNE COUNTY, UTAH

By:

Shari Maria Silverman

Prepared For:

Bureau of Land Management  
Vernal Field Office

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, UT 84052

Prepared By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 147  
Moab, Utah 84532

MOAC Report No. 05-225

July 13, 2005

United States Department of Interior (FLPMA)  
Permit No. 05-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-05-MQ-0668b

**NEWFIELD PRODUCTION COMPANY**

**PALEONTOLOGICAL FIELD SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
DUCHESNE COUNTY, UTAH**

Section 8, T 9 S, R 16 E [SW 1/4 & SE 1/4, NE 1/4; and SE 1/4]; Section 17, T 9 S, R 16 E [NE 1/4; NE 1/4, NW 1/4 & SW 1/4, SE 1/4; NE 1/4, NW 1/4, & SW 1/4, SW 1/4]; Section 19, T 9 S, R 16 E [entire section]; Section 20, T 9 S, R 16 E [excluding NW 1/4, NE 1/4; and NW 1/4 & SE 1/4, NW 1/4]; Section 21, T 9 S, R 16 E [excluding NE 1/4 & NW 1/4, NE 1/4]

**REPORT OF SURVEY**

Prepared for:

**Newfield Production Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
November 10, 2005

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/21/2006

API NO. ASSIGNED: 43-013-33066

WELL NAME: FEDERAL 1-20-9-16

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

NENE 20 090S 160E

SURFACE: 0617 FNL 0652 FEL

BOTTOM: 0617 FNL 0652 FEL

COUNTY: DUCHESNE

LATITUDE: 40.02189 LONGITUDE: -110.1354

UTM SURF EASTINGS: 573779 NORTHINGS: 4430334

FIELD NAME: MONUMENT BUTTE ( 105 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-52018

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

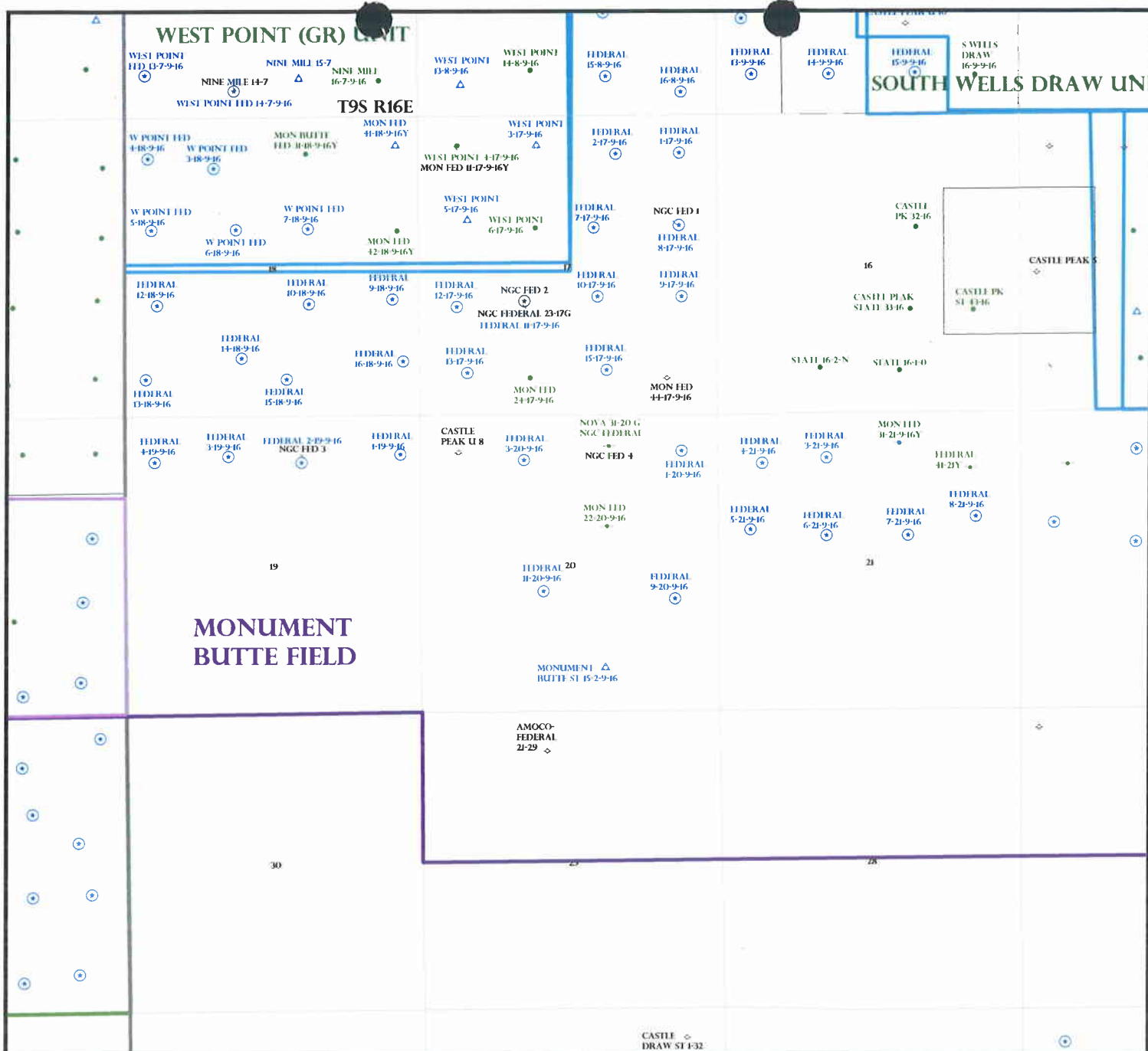
☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTB000192 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. MUNICIPAL )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

\_\_\_\_ R649-2-3.  
Unit: \_\_\_\_\_  
☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
\_\_\_\_ R649-3-3. Exception  
\_\_\_\_ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_  
\_\_\_\_ R649-3-11. Directional Drill

COMMENTS: See Separate file

STIPULATIONS: 1- Federal Approval  
2- Spacing Strip



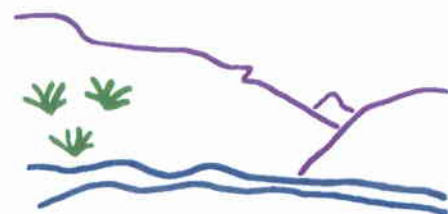
OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 19,20,21 T. 9S R. 16E

FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

SPACING: R649-3-2 / GENERAL SITING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 23-FEBRUARY-2006



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

February 23, 2006

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Federal 1-20-9-16 Well, 617' FNL, 652' FEL, NE NE, Sec. 20, T. 9 South,  
R. 16 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33066.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office

Operator: Newfield Production Company  
Well Name & Number Federal 1-20-9-16  
API Number: 43-013-33066  
Lease: UTU-52018

Location: NE NE Sec. 20 T. 9 South R. 16 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

**UTU-52018**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**N/A**

8. Well Name and No.

**FEDERAL 1-20-9-16**

9. API Well No.

**43-013-33066**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**DUCHESNE COUNTY, UT.**

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒

Oil

Well

☐

Gas

Well

☐

Other

2. Name of Operator

**NEWFIELD PRODUCTION COMPANY**

3. Address and Telephone No.

**Rt. 3 Box 3630, Myton Utah, 84052 435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**617 FNL 652 FEL NE/NE Section 20, T9S R16E**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**TYPE OF SUBMISSION**

☒

Notice of Intent

☐

Subsequent Report

☐

Final Abandonment Notice

**TYPE OF ACTION**

☐

Abandonment

☐

Recompletion

☐

Plugging Back

☐

Casing Repair

☐

Altering Casing

☒

Other

**Permit Extension**

☐

Change of Plans

☐

New Construction

☐

Non-Routine Fracturing

☐

Water Shut-Off

☐

Conversion to Injection

☐

Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Newfield Production Company requests to extend the Permit to Drill this well for one year. The original approval date was 2/23/06 (expiration 2/23/07).

This APD has not been approved yet by the BLM.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 02-07-07

By: [Signature]

2-8-07  
Rm

FEB 06 2007

14. I hereby certify that the foregoing is true and correct

Signed

[Signature]  
Mandie Crozier

Title

Regulatory Specialist

Date

2/2/2007

CC: UTAH DOGM

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

CC: Utah DOGM

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-013-33066  
**Well Name:** Federal 1-20-9-16  
**Location:** NE/NE Section 20,T9S R16E  
**Company Permit Issued to:** Newfield Production Company  
**Date Original Permit Issued:** 2/23/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒ (A)

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

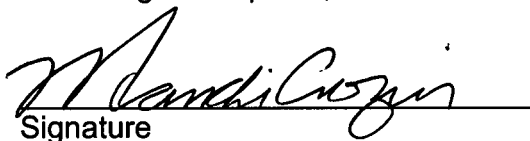
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

2/2/2007

Date

**Title:** Regulatory Specialist

**Representing:** Newfield Production Company

FEB 06 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.

UTU-52018

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or C/A Agreement, Name and No.

N/A

8. Lease Name and Well No.

Federal 1-20-9-16

9. API Well No.

43-013-33066

10. Field and Pool, or Exploratory

Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area

NE/NE Sec. 20, T9S R16E

12. County or Parish

Duchesne

13. State

UT

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Newfield Production Company

3a. Address

Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)

(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface NE/NE 617' FNL 652' FEL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*

Approximatley 15.2 miles southwest of Myton, Utah

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

Approx. 652' f/lse, NA' f/unit

16. No. of Acres in lease

640.00

17. Spacing Unit dedicated to this well

40 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

Approx. 1369'

19. Proposed Depth

6040'

20. BLM/BIA Bond No. on file

UTB000192

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6038' GL

22. Approximate date work will start\*

2nd Quarter 2006

23. Estimated duration

Approximately seven (7) days from spurt to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

*Mandie Crozier*

Name (Printed/Typed)

Mandie Crozier

Date

2/17/06

Title

Regulatory Specialist

Approved by (Signature)

*Jerry Keweka*

Name (Printed/Typed)

Jerry Keweka

Date

2-7-2007

Title

Assistant Field Manager  
Lands & Mineral Resources

Office

VERNAL FIELD OFFICE

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

FEB 13 2007

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

UDOGM

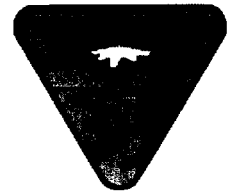
No NOS

07BM4687A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Production Company  
Well No: Federal 1-20-9-16  
API No: 43-013-33066

Location: NENE, Sec 20, T9S, R16E  
Lease No: UTU-52018  
Agreement: N/A

Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	Cell: 435-828-7875
Petroleum Engineer:	Jim Ashley	Office: 435-781-4470	Cell: 435-828-7874
Petroleum Engineer:	Ryan Angus	Office: 435-781-4430	
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
Environmental Scientist:	Karl Wright	Office: 435-781-4484	
Natural Resource Specialist:	Holly Villa	Office: 435-781-4404	
Natural Resource Specialist:	Melissa Hawk	Office: 435-781-4476	
Natural Resource Specialist:	Chuck Macdonald	Office: 435-781-4441	
Natural Resource Specialist:	Darren Williams	Office: 435-781-4447	
Natural Resource Specialist:	Verlyn Pindell	Office: 435-781-3402	
After Hours Contact Number: 435-781-4513		Fax: 435-781-4410	

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

- |   |  |
|---|--|
| Location Construction<br>(Notify Chuck Macdonald)       | - Forty-Eight (48) hours prior to construction of location and access roads.   |
| Location Completion<br>(Notify Chuck Macdonald)         | - Prior to moving on the drilling rig.   |
| Spud Notice<br>(Notify Petroleum Engineer)              | - Twenty-Four (24) hours prior to spudding the well.   |
| Casing String & Cementing<br>(Notify Jamie Sparger)     | - Twenty-Four (24) hours prior to running casing and cementing all casing strings.   |
| BOP & Related Equipment Tests<br>(Notify Jamie Sparger) | - Twenty-Four (24) hours prior to initiating pressure tests.   |
| First Production Notice<br>(Notify Petroleum Engineer)  | - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days. |

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

**LEASE STIPULATIONS**

- Lands in this lease have been identified as containing Golden eagle habitat. Modifications to the Surface Use Plan of Operations may be required in order to protect the Golden eagle and/or habitat from surface disturbing activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

**GENERAL CONDITIONS OF APPROVAL**

- This well is being approved in accordance with Washington Instruction Memorandum 2005-247 and Section 390 (Category 3) of the Energy Policy Act which establishes statutory categorical exclusions (CX) under the National Environmental Policy Act (NEPA). Category 3 states that an oil or gas well can be drilled within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well. This well is covered under the *Final Environmental Impact Statement and Record of Decision Castle Peak and Eightmile Flat Oil and Gas Exploration Project Newfield Rocky Mountains Inc.*, signed August 24, 2005. If the well has not been spudded by August 24, 2010, a new environmental document will have to be prepared prior to the approval of the APD.
- All applicable local, state, and/or federal laws, regulations, and/or statutes will be complied with.
- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- The reserve pit will be lined with a 12 ml or greater liner and felt prior to spudding.

- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- If paleontologic or cultural materials are uncovered during construction, the operator shall immediately stop work that might further disturb or move such materials and contact the Authorized Officer (AO) within 48 hours. A determination will be made by the AO as to necessary mitigation for the discovered paleontologic/cultural material.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- The interim seed mix for this location shall be:

Indian Ricegrass ( <i>Oryzopsis hymenoides</i> )	4 lbs/acre
Needle and Threadgrass ( <i>Stipa comata</i> ):	4 lbs/acre
Scarlet Globemallow ( <i>Sphaeralcea coccinea</i> ):	1 lb/acre
Winter Fat ( <i>Ceratoides lanata</i> )	3 lbs/acre

- All pounds are in pure live seed.
  - Rates are set for drill seeding; double the rate if broadcasting.
  - Reseeding may be required if initial seeding is not successful.
- The operator will be responsible for treatment and control of invasive and noxious weeds.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (preferably of native origin). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.

- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.
- Operator shall notify any active gilsonite mining operation within 2 miles of the location 48 hours prior to any blasting during construction for this well.

### ***DOWNHOLE CONDITIONS OF APPROVAL***

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

#### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

1. A variance is granted for O.O. #2 III. E. 1.
  - a. The blooie line shall be straight or have targeted tees for bends in the line.
  - b. Not requiring an automatic igniter or continuous pilot on the blooie line.
2. Run a cement bond log from TD to the base of the surface casing shoe.

#### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

1. There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
2. The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
3. **Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.**
4. Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

No aggressive/fresh hard-banded drill pipe shall be used within casing.

Cement baskets shall not be run on surface casing.

5. The lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
6. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
7. The lessee/operator must report encounters of all non oil and gas mineral resources (such as gilsonite, tar sands, oil shale, etc.) to the Vernal Field Office in writing within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
8. No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM, Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM, Vernal Field Office shall be obtained and notification given before resumption of operations.
9. Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

Any change in the program shall be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) shall be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.

In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

10. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys,

sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

**Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Wellogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

11. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease shall have prior written approval from the BLM, Vernal Field Office.

All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.

12. Oil and gas meters shall be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
13. A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
14. This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - a. Operator name, address, and telephone number.
  - b. Well name and number.
  - c. Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - d. Date well was placed in a producing status (date of first production for which royalty will be paid).
  - e. The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

- f. The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - g. Unit agreement and / or participating area name and number, if applicable.
  - h. Communitization agreement number, if applicable.
- 15. Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.
- 16. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production
- 17. Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- 18. Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
USA UTU-52018  
6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.  
FEDERAL 1-20-9-16

9. API Well No.  
4301333066

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, UT

SUBMITTER'S PRINTED NAME - Other Instructions on reverse side

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
617 FNL 652 FEL  
NENE Section 20 T9S R16E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Spud Notice _____
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 5/16/07 MIRU NDSI NS #1. Spud well @ 12:30pm. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 324.21' On 5/20/07 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 7 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

05/20/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

RECEIVED

MAY 22 2007

DIV. OF OIL, GAS & MINING

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 324.21

LAST CASING 8 5/8" SET AT 324.21'  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 320' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR NewField Production Company  
 WELL Federal 1-20-9-16  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # NDSI NS #1

## LOG OF CASING STRING:

LESS OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Shoe Joint 44.70'					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	312.36
		GUIDE shoe			8rd	A	0.9
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			314.21
TOTAL LENGTH OF STRING		314.21	7	LESS CUT OFF PIECE			2
LESS NON CSG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		0		CASING SET DEPTH			324.21
TOTAL		312.36	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		312.36	7				
TIMING		1ST STAGE		GOOD CIRC THRU JOB _____ Yes Bbls CMT CIRC TO SURFACE _____ 7 RECIPROCATED PIPE FOR _____ THRU _____ FT STROKE N/A BUMPED PLUG TO _____ 140 PSI			
BEGIN RUN CSG.	Spud	5/16/2007	12:30 PM				
CSG. IN HOLE		5/17/2007	10:00 AM				
BEGIN CIRC		5/20/2007	9:23 AM				
BEGIN PUMP CMT		5/20/2007	9:35 AM				
BEGIN DSPL. CMT		5/20/2007	9:47 AM				
PLUG DOWN		5/20/2007	10:07 AM				
CEMENT USED		CEMENT COMPANY- B. J.					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	160	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield					
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING				
Centralizers - Middle first, top second & third for 3							

COMPANY REPRESENTATIVE Don Bastian DATE 5/20/2007

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM - FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3638  
MYTON, UT 84052

OPERATOR ACCT. NO. N2895

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				SPUD DATE	EFFECTIVE DATE	
					QQ	SC	TP	RG			COUNTY
A	99999	16137	4301333066	FEDERAL 1-20-9-16	NENW	20	9S	16E	DUCHESNE	5/17/2007	5/30/07
WELL 1 COMMENTS: <i>GRRV</i>											
B	99999	14844	4304738193	<i>Sundance</i> FEDERAL 14-1-9-17	NENW	12	9S	17E	DUCHESNE	5/18/2007	5/30/07
<i>GRRV</i> <i>BHL = SE SW SEC 1</i>											
A	99999	16138	4301332921	FEDERAL 10-18-9-16	NWSE	18	9S	16E	DUCHESNE	5/18/2007	5/30/07
<i>GRRV</i>											
A	99999	16139	4301333136	FEDERAL 13-15-9-16	SWSW	15	9S	16E	DUCHESNE	5/22/2007	5/30/07
<i>GRRV</i>											
B	99999	12418	4301332919	<i>West Point</i> FEDERAL 7-18-9-16	SWNE	18	9S	16E	DUCHESNE	5/22/2007	5/30/07
WELL 5 COMMENTS: <i>GRRV</i>											
A	99999	16140	4301333164	FEDERAL 15-21-9-16	SWSE	21	9S	16E	DUCHESNE	5/18/2007	5/30/07
WELL 5 COMMENTS: <i>GRRV</i>											

ACTION CODES (See instructions on back of form)

- A - new entity for new well (single well only)
- B - well to existing entity (group or unit well)
- C - from one existing entity to another existing entity
- D - well from one existing entity to a new entity
- E - shut (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED  
MAY 23 2007

DIV. OF OIL, GAS & MINING

*Jentri Park*  
Signature  
Jentri Park  
Production Clerk  
April 18, 2007  
Date

# DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Company: Newfield Production Company

Well Name: Federal 1-20-9-16

API No: 43-013-33066 Lease Type: Federal

Section 20 Township 09S Range 16E County Duchesne

Drilling Contractor NDSI Rig # NS#1

### **SPUDDED:**

Date 5-16-07

Time 12:30 PM

How Dry

**Drilling will Commence:** \_\_\_\_\_

Reported by Troy Zufeit

Telephone # 435-823-6013

Date 5-18-07 Signed RM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
USA UTU-52018

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.  
FEDERAL 1-20-9-16

9. API Well No.  
4301333066

10. Field and Pool, or Exploratory Area  
MONUMENT BUTTE

11. County or Parish, State  
DUCHESNE, UT

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)  
435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
617 FNL 652 FEL  
NENE Section 20 T9S R16E

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 6/23/07 MIRU Patterson # 155. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 277'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6050'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 136 jt's of 5.5 J-55, 15.5# csgn. Set @ 6029.08 / KB. Cement with 325 sks cement mixed @ 11.0 ppg & 3.43 yld. The 425 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 13 bbls of cement to reserve pit. Nipple down Bop's. Drop slips @ 120,000 #'s tension. Release rig @ 2:30pm 6/30/07.

RECEIVED  
JUL 03 2007

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Don Bastian

Signature

*Don Bastian*

Title

Drilling Foreman

Date

06/30/2007

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 6029.08

Flt clr @ 6002.84

LAST CASING 8 5/8" SET # 323.65'

OPERATOR Newfield Production Company

DATUM 12' KB

WELL Federal 1-20-9-16

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

DATUM TO BRADENHEAD FLANGE \_\_\_\_\_

CONTRACTOR & RIG # Patterson #155

TD DRILLER 6040 Loggers \_\_\_\_\_

HOLE SIZE 7 7/8"

**LOG OF CASING STRING:**

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		Short jt 4301' (5.85')					
136	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	5990.83
		Float collar					0.6
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	25
		<b>GUIDE</b> shoe			8rd	A	0.65
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			6031.08
TOTAL LENGTH OF STRING		6031.08	143	LESS CUT OFF PIECE			14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		243.17	6	CASING SET DEPTH			<b>6029.08</b>
TOTAL		<b>6259.00</b>	143	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		6259	143				
TIMING		1ST STAGE	2nd STAGE				
BEGIN RUN CSG.		2:00AM	6/30/2007	GOOD CIRC THRU JOB <u>YES</u>			
CSG. IN HOLE		6:30 AM	6/30/2007	Bbls CMT CIRC TO SURFACE <u>13</u>			
BEGIN CIRC		6:30 AM	6/30/2007	RECIPROCATED PIPE FOR <u>THRUSTROKE NA</u>			
BEGIN PUMP CMT		8:18 AM	6/30/2007	DID BACK PRES. VALVE HOLD ? <u>YES</u>			
BEGIN DSPL. CMT		9:19 AM	6/30/2007	BUMPED PLUG TO <u>1450</u> PSI			
PLUG DOWN		9:42 AM	6/30/2007				

CEMENT USED		CEMENT COMPANY- B. J.
STAGE	# SX	CEMENT TYPE & ADDITIVES
1	325	Prem-lite II w/ 10% gel + 3 % KCL, 3#s /sk CSE + 2# sk/kolseal + 1/2#s/sk Cello Flake
		mixed @ 11.0 ppg W / 3.49 cf/sk yield
2	425	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD
CENTRALIZER & SCRATCHER PLACEMENT		SHOW MAKE & SPACING
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.		

COMPANY REPRESENTATIVE Don Bastian DATE 6/30/2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

617 FNL 652 FEL

NENE Section 20 T9S R16E

5. Lease Serial No.

USA UTU-52018

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

8. Well Name and No.

FEDERAL 1-20-9-16

9. API Well No.

4301333066

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production(Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
**FOR RECORD ONLY**

I hereby certify that the foregoing is true and  
correct (Printed/ Typed)

Mandie Crozier

Signature

Title

Regulatory Specialist

Date

07/30/2007

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or  
certify that the applicant holds legal or equitable title to those rights in the subject lease  
which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on reverse)

**RECEIVED**  
**AUG 02 2007**

DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-52018

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

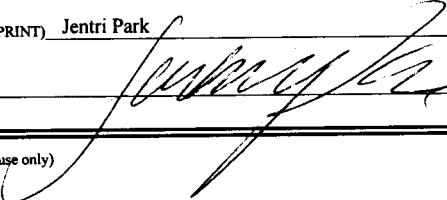
1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		8. WELL NAME and NUMBER: FEDERAL 1-20-9-16
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 617 FNL 652 FEL		9. API NUMBER: 4301333066
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENE, 20, T9S, R16E		10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE
		COUNTY: DUCHESNE
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 07/31/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Weekly Status Report
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 07/25/07, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park TITLE Production Clerk  
SIGNATURE  DATE 07/31/2007

(This space for State use only)

**RECEIVED**  
**AUG 07 2007**

DIV. OF OIL, GAS & MINING

**Daily Activity Report**

Format For Sundry

**FEDERAL 1-20-9-16****5/1/2007 To 9/30/2007****7/11/2007 Day: 1****Completion**

Rigless on 7/10/2007 - Install 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5929' & cement top @ 60'. Perforate stage #1. CP1 sds @ 5526-44' w/ 3 1/8" Slick guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 72 shots. 143 BWTR. SIFN.

**7/20/2007 Day: 2****Completion**

Rigless on 7/19/2007 - NU BJ Services "Ram head" frac flange. RU BJ & frac stage #1 (CP1 sds) W/ 40,327# 20/40 sand in 416 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 2756 psi. Treated @ ave press of 2186 psi W/ ave rate of 24.7 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #2. ISIP--2165 psi. Leave pressure on well. Est 559 BWTR. RU Perforators WLT, crane & lubricater. Run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 5230'. Perf stage #2 (LODC sds) @ 5124-38' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #2 W/ 60,273# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 3621 psi (on third attempt of pressuring against perfs). Treated @ ave press of 2674 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #3. ISIP--2760 psi. Leave pressure on well. Est 1069 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 15' X 3/18" slick perf gun. Set plug @ 4900'. Perf stage #3 (C sds) @ 4780-95' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #3 W/ 60,060# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 4170 psi (on sixth attempt of pressuring against perfs). Treated @ ave press of 1833 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #4. ISIP--1800 psi. Leave pressure on well. Est 1579 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 4740'. Perf stage #4 (D2 sds) @ 4680-94' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #4. Unable to breakdown perfs after several attempts W/ 4200 psi max. RU WLT & RIH W/ 3 1/2" dumpbailer W/ 8 gals 15% HCL acid. Tag sd @ 4661'. Dump acid & LD bailer. Flow well back on chokes for 2 1/2 hrs, rec est 150 BTF. Recovered acid & strung out sand. Flowing fairly clean @ end. Casing pressure @ 150 psi. RU BJ & breakdown D2 perfs @ 1889 psi. Frac stage #4 W/ 79,938# 20/40 sand in 623 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Treated @ ave press of 1860 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #5. ISIP--1960 psi. Leave pressure on well. Est 2052 BWTR. RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 7' X 3/18" slick perf gun. Set plug @ 4250'. Perf stage #5 (GB6 sds) @ 4160-67' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #5. Pressure against perfs to 4200 psi--holding solid. \*\*BJ Blender will not run !!\*\* Shut well in with pressure overnight. Est 2052 BWTR.

**7/21/2007 Day: 3****Completion**

NC #1 on 7/20/2007 - 2250 psi on well. RU BJ Services & breakdown stage #5 (GB6 sds) @ 4201 psi. Frac stage #5 W/ 28,569# 20/40 sand in 317 bbls Lightning frac 17 fluid. Treated @ ave press of 1594 psi W/ ave rate of 24.9 BPM. ISIP--1545 psi. RD BJ & WLT. Begin immediate flowback of frac on 12/64 choke @ 1 BPM. Zone flowed 2.5 hrs rec add'l 135 BTF (est 12% of combined frac load of 2376 bbls-- includes 150 bbls f/ previous FB). MIRU NC #1. ND Cameron BOP & 5M frac head. Install 3M production tbg head & NU Weatherford Schaeffer BOP. Talley, PU & TIH W/ new Weatherford 4 3/4" "Chomp" bit, bit sub & new 2 7/8 8rd 6.5# J-55 tbg. Tag fill @ 4181'. Tbg displaced 10 BW on TIH. RU power swivel. C/O sd to composite plug @ 4250'. Drill out plug in 25 minutes. Circ hole clean W/ no fluid loss. Hang back swivel. SIFN W/ EOT @ 4313'. Est 2224 BWTR.

---

**7/24/2007 Day: 4**

**Completion**

NC #1 on 7/23/2007 - 6:30 AM OWU, Swvl I/Hle To Plg @ 4740', Drill Up Plg, Swvl I/Hle To Fill @ 4878', C/Out To Plg @ 4900', Drill Up Plg, Swvl I/Hle To Fill @ 5145', C/Out To Plg @ 5230', Drill Up Plg, Swvl I/Hle To Fill @ 5750', Drill & C/Out To PBTD @ 5957.82' KB, Curc Well Clean 1 Hr, R/D Swvl, POOH W/-5 Jts Tbg EOB @ 5819', R/U Swab, Made 15 Swab Runs, Recvred 177 Bbls Wtr, Lite Trce Sand, Lite Trce Oil, FFL @ 1600', SWI, 6:30PM C/SDFN, Lost 123 Bbls Wtr On Drill Out To PBTD, Recvred 177 Bbls Wtr Swabbing, Total Wtr Recvery For Day = 54 Bbls.

---

**7/25/2007 Day: 5**

**Completion**

NC #1 on 7/24/2007 - 6:30 AM OWU, RIH W/-5 Jts Tbg To Fill @ 5952', R/U R/pmp & C/Out To PBTD @ 5957.82', Curc Well Clean, POOH W/-194 Jts Tbg, Bit Sub & Bit. P/U & RIH W/-Tbg Production Detail Shown Below. N/D BOP, Set 5 1/2 T/A In 15,000 Tension, N/U W/-HD. R/U R/pmp, Flsh Tbg W/-60 Bbls Wtr. P/U Stroke & RIH W/- CDI-2 1/2x1 1/2x16x20' RHAC, 6-1 1/2x25' Wt Bars, 20-3/4x25' Guided Rods, 50- 3/4x25' Slick Rods, SWI, 6:30PM C/SDFN. Lost 87 Bbls Wtr On Curc Out To PBTD.

---

**7/26/2007 Day: 6**

**Completion**

NC #1 on 7/25/2007 - 6:30 AM OWU, RIH 45-3/4X25' Slick Rods, 100-3/4X25' Guided Rods, 3/4X8'-6'-4'-2' Ponys, 1 1/2X26' Polish Rod, R/U Unit, R/U Rig Pump, Fill Tbg W/-1 Bbl Wtr, Stroke Unit & Tbg To 800 Psi, Good Test. R/D Eq, R/D Rig. POP @ 10:30AM , 120" SL, 5 SPM, ( Final Report )

---

**Pertinent Files: Go to File List**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

**1a. TYPE OF WORK**

OIL WELL ☒

GAS WELL ☐

DRY ☐

Other \_\_\_\_\_

**1b. TYPE OF WELL**

NEW WELL ☒

WORK OVER ☐

DEEPEEN ☐

PLUG BACK ☐

DIFF RESVR. ☐

Other \_\_\_\_\_

**2. NAME OF OPERATOR**

Newfield Exploration Company

**3. ADDRESS AND TELEPHONE NO.**

1401 17th St. Suite 1000 Denver, CO 80202

**4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)\***

At Surface

617' FNL & 652' FEL (NE/NE) Sec. 20, T9S, R16E

At top prod. Interval reported below

At total depth

**14. API NO.**

43-013-33066

**DATE ISSUED**

02/23/07

**12. COUNTY OR PARISH**

Duchesne

**13. STATE**

UT

**15. DATE SPUDDED**

05/16/07

**16. DATE T.D. REACHED**

06/29/07

**17. DATE COMPL. (Ready to prod.)**

07/25/07

**18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\***

6038' GL

6050' KB

**19. ELEV. CASINGHEAD**

**20. TOTAL DEPTH, MD & TVD**

6050'

**21. PLUG BACK T.D., MD & TVD**

5958'

**22. IF MULTIPLE COMPL., HOW MANY\***

**23. INTERVALS**

DRILLED BY

----->

**ROTARY TOOLS**

X

**CABLE TOOLS**

**24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\***

Green River 4160'-5544'

**25. WAS DIRECTIONAL SURVEY MADE**

No

**26. TYPE ELECTRIC AND OTHER LOGS RUN**

Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log

**27. WAS WELL CORED**

No

**23. CASING RECORD (Report all strings set in well)**

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	324'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6029'	7-7/8"	325 sx Premlite II and 425 sx 50/50 Poz	

**29. LINER RECORD**

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	EOT @ 5615'	TA @ 5518'

**31. PERFORATION RECORD (Interval, size and number)**

INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(CP1) 5526'-5544'	.49"	4/72	5526'-5544'	Frac w/ 40,327# 20/40 sand in 416 bbls fluid
(LODC) 5124'-5138'	.43"	4/56	5124'-5138'	Frac w/ 60,273# 20/40 sand in 510 bbls fluid
(C) 4780'-4795'	.43"	4/60	4780'-4795'	Frac w/ 60,060# 20/40 sand in 510 bbls fluid
(D2) 4680'-4694'	.43"	4/56	4680'-4694'	Frac w/ 49,938# 20/40 sand in 623 bbls fluid
(GB6) 4160'-4167'	.43"	4/28	4160'-4167'	Frac w/ 28,569# 20/40 sand in 317 bbls fluid

RECEIVED  
AUG 14 2007

**33.\* PRODUCTION**

DATE FIRST PRODUCTION 07/25/07	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) 2-1/2" x 1-1/2" x 16' x 20' RHAC SM Plunger Pump			DIV. OF OIL, GAS & MIN. (Producing or shut-in) PRODUCING			
DATE OF TEST 10 day ave	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD ----->	OIL--BBL. 26	GAS--MCF. 0	WATER--BBL. 87	GAS-OIL RATIO 0
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE ----->	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	

**34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)**

Sold & Used for Fuel

**TEST WITNESSED BY**

**35. LIST OF ATTACHMENTS**

**36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records**

SIGNED

Jentri Park

TITLE

Production Clerk

DATE

8/10/2007

JP

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
			Well Name Federal 1-20-9-16		MEAS. DEPTH	TRUE VERT. DEPTH
				Garden Gulch Mkr	3635'	
				Garden Gulch 1	3833'	
				Garden Gulch 2	3940'	
				Point 3 Mkr	4186'	
				X Mkr	4450'	
				Y-Mkr	4482'	
				Douglas Creek Mkr	4597'	
				BiCarbonate Mkr	4834'	
				B Limestone Mkr	4930'	
				Castle Peak	5488'	
				Basal Carbonate	5926'	
				Total Depth (LOGGERS)	6030'	



April 30, 2012

Mr. Mark Reinbold  
State of Utah  
Division of Oil, Gas and Mining  
1594 W North Temple  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Federal #1-20-9-16  
Monument Butte Field, Lease #UTU-52018  
Section 20-Township 9S-Range 16E  
Duchesne County, Utah

Dear Mr. Reinbold:

Newfield Production Company herein requests approval to convert the Federal #1-20-9-16 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact me at (303) 893-0102.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Sundberg". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Eric Sundberg  
Regulatory Lead

**RECEIVED**

**MAY 01 2012**

**DIV OF OIL, GAS, & MINING**

**NEWFIELD PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**FEDERAL #1-20-9-16**  
**MONUMENT BUTTE FIELD (GREEN RIVER) FIELD**  
**LEASE #UTU-52018**  
**APRIL 30, 2012**

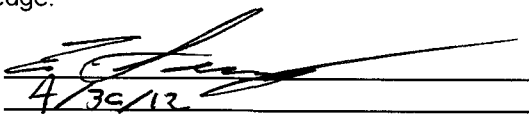
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STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR INJECTION WELL - UIC FORM 1

OPERATOR Newfield Production Company  
ADDRESS 1001 17th Street, Suite 2000  
Denver, Colorado 80202

Well Name and number: <u>Federal #1-20-9-16</u>	
Field or Unit name: <u>Monument Butte (Green River)</u>	Lease No. <u>UTU-52018</u>
Well Location: QQ <u>NENE</u> section <u>20</u> township <u>9S</u> range <u>16E</u> county <u>Duchesne</u>	
Is this application for expansion of an existing project? ..... Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Will the proposed well be used for:	
Enhanced Recovery? .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Disposal? .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Storage? .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is this application for a new well to be drilled? ..... Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If this application is for an existing well,	
has a casing test been performed on the well? ..... Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Date of test: _____	
API number: <u>43-013-33066</u>	
Proposed injection interval: from <u>3939</u> to <u>5958</u>	
Proposed maximum injection: rate <u>500 bpd</u> pressure <u>1769</u> psig	
Proposed injection zone contains [x] oil, [ ] gas, and/or [ ] fresh water within 1/2 mile of the well.	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">IMPORTANT: Additional information as required by R615-5-2 should accompany this form.</div>	
List of Attachments: <u>Attachments "A" through "H-1"</u>	
I certify that this report is true and complete to the best of my knowledge.	
Name: <u>Eric Sundberg</u>	Signature <u></u>
Title: <u>Regulatory Lead</u>	Date: <u>4/30/12</u>
Phone No. <u>(303) 893-0102</u>	
(State use only)	
Application approved by _____	Title _____
Approval Date _____	
Comments:	

# FEDERAL 1-20-9-16

Spud Date: 05/16/07  
Put on Production: 07/25/07  
GL: 6038' KB: 6050'

Initial Production: BOPD,  
MCFD, BWPD

## Proposed Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (312.36')  
DEPTH LANDED: 324.21' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 137 jts. (6015.83')  
DEPTH LANDED: 6029.08' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 60'

### TUBING

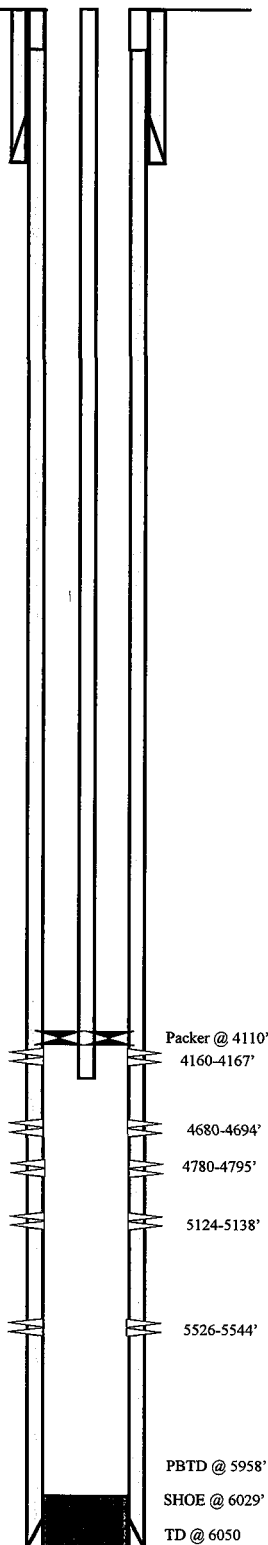
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 179 jts (5506.29')  
TUBING ANCHOR: 5518.29' KB  
NO. OF JOINTS: 1 jts (30.52')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5551.61' KB  
NO. OF JOINTS: 2 jts (61.81')  
TOTAL STRING LENGTH: EOT @ 5614.97' KB

### FRAC JOB

07/19/07	5526-5544'	<b>Frac CP1 sands as follows:</b> 40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.
07/19/07	5124-5138'	<b>Frac LODC sands as follows:</b> 60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.
07/19/07	4780-4795'	<b>Frac C sands as follows:</b> 60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.
07/19/07	4680-4694'	<b>Frac D2 sands as follows:</b> 79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal
07/20/07	4160-4167'	<b>Frac GB6 sands as follows:</b> 25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal
1/26/09		Pump Change. Updated r & t details.

### PERFORATION RECORD

07/10/07	5526-5544'	4 JSPF	72 holes
07/19/07	5124-5138'	4 JSPF	56holes
07/19/07	4780-4795'	4 JSPF	60 holes
07/19/07	4680-4694'	4 JSPF	56 holes
07/19/07	4160-4167'	4 JSPF	28 holes



**NEWFIELD**

**FEDERAL 1-20-9-16**

617°FNL & 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

## **WORK PROCEDURE FOR INJECTION CONVERSION**

1. Rig up hot oil truck to casing. Pump water. Unseat pump. Flush rods. Trip out of hole with rods and pump.
2. Trip out of hole with tubing, breaking and doping every connection. Trip in hole with packer and tubing. Rig up water truck to casing. Pump packer fluid. Set packer.
3. Test casing and packer.
4. Rig down and move out.

**REQUIREMENTS FOR INJECTION OF FLUIDS INTO RESERVOIRS  
RULE R615-5-1**

- 1. Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**
- 2. A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

**2.1 The name and address of the operator of the project.**

Newfield Production Company  
1001 17<sup>th</sup> Street, Suite 2000  
Denver, Colorado 80202

**2.2 A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile of the project area.**

See Attachment A.

**2.3 A full description of the particular operation for approval is requested.**

Approval is requested to convert the Federal #1-20-9-16 from a producing oil well to a water injection well in Monument Butte (Green River) Field.

**2.4 A description of the pools from which the identified wells are producing or have produced.**

The proposed injection well will inject into the Green River Formation.

**2.5 The names, description and depth of the pool or pools to be affected.**

The injection zone is in the Green River Formation. For the Federal #1-20-9-16 well, the proposed injection zone is from Garden Gulch to Basal Carbonate (3939' - 5958'). The confining strata directly above and below the injection zones are the Garden Gulch and the top of the Wasatch Formation or TD, which ever is shallower. The Garden Gulch Marker top is at 3612' and the TD is at 6050'.

**2.6 A copy of a log of a representative well completed in the pool.**

The referenced log for the Federal #1-20-9-16 is on file with the Utah Division of Oil, Gas and Mining.

- 2.7 A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

- 2.8 A list of all operators and surface owners within one-half mile radius of the proposed project.**

See Attachment B.

- 2.9 An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.**

See Attachment C.

- 2.10 Any additional information the Board may determine is necessary to adequately review the petition.**

Newfield Production Company will supply any additional information requested by the Utah Division of Oil, Gas and Mining.

- 4.0 Establish recovery projects may be expanded and additional wells placed on injection only upon authority from the Board after notice and hearing or by administrative approval.**

This proposed injection well is on a Federal lease (Lease #UTU-52018) in the Monument Butte Federal (Green River) Field, and this request is for administrative approval.

**REQUIREMENTS FOR CLASS II INJECTION WELLS INCLUDING WATER DISPOSAL,  
STORAGE AND ENHANCED RECOVERY WELLS  
SECTION V – RULE R615-5-2**

- 1. Injection well shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.**
- 2. The application for an injection well shall include a properly completed Form DOGM-UIC-1 and the following:**
  - 2.1 A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed wells, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.**

See Attachments A and B.
  - 2.2 Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper and porosity.**

All logs are on file with the Utah Division of Oil, Gas and Mining.
  - 2.3 A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.**

A copy of the cement bond log is on file with the Utah Division of Oil, Gas and Mining.
  - 2.4 Copies of logs already on file with the Division should be referenced, but need not be refilled.**

All copies of logs are on file with the Utah Division of Oil, Gas and Mining.
  - 2.5 A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.**

The casing program is 8-5/8", 24# surface casing run to 324' KB, and 5-1/2", 15.5# casing run from surface to 6029' KB. A casing integrity test will be conducted at the time of conversion. See Attachment E.
  - 2.6 A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water commingled with produced water. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.
  - 2.7 Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F.

**The proposed average and maximum injection pressures.**

The proposed average injection pressure will be approximately 1100 psig and the maximum injection pressure will not exceed 1769 psig.

- 2.8 Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.**

The minimum fracture gradient for the Federal #1-20-9-16, for existing perforations (4160' - 5544') calculates at 0.81 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 1769 psig. We may add additional perforations between 3612' and 6050'. See Attachments G and G-1.

- 2.9 Appropriate geological data on the injection interval and confining beds, including the geologic name, lithologic description, thickness, depth, and lateral extent.**

In the Federal #1-20-9-16, the proposed injection zone (3939' - 5958') is in the Garden Gulch to the Basal Carbonate of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The members are composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31' and is confined to the Monument Butte Federal Field. Outside the Monument Butte Federal Field, the sandstone is composed of tight, very fine, silty, calcareous sandstone, less than 3' thick. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

- 2.10 A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter the improper intervals.**

See Attachments E through E-11.

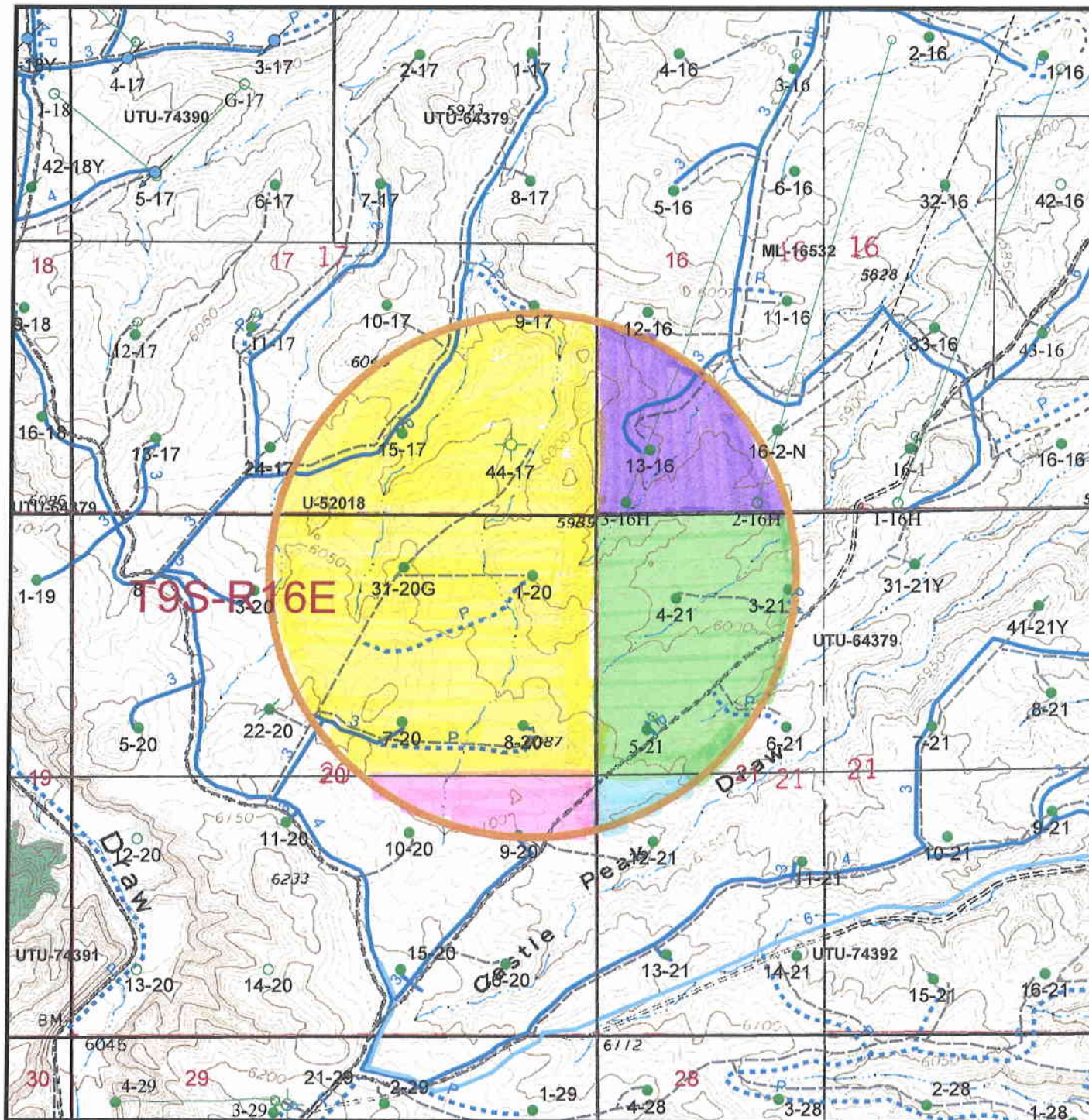
Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure relief.

- 2.11 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.**

See Attachment C.

- 2.12 Any other information that the Board or Division may determine is necessary to adequately review the application.**

Newfield Production Company will supply any requested information to the Board or Division.



- WellStatus\_HalfMile\_Buffer**
- Well Status**
- Location
  - CTI
  - Surface Spud
  - Drilling
  - Waiting on Completion
  - Producing Oil Well
  - Producing Gas Well
  - Water Injection Well
  - Dry Hole
  - Temporarily Abandoned
  - Plugged & Abandoned
  - Shut In
- Injection system**
- high pressure
  - low pressure
  - proposed
  - return
  - return proposed
- Leases**
- Mining tracts**

UTU-52018

UTU-74391

UTU-74392

ML-16532

UTU-64379

Federal 1-20  
Section 20, T9S-R16E

**NEWFIELD**

ROCKY MOUNTAINS 1 in = 1,500 feet

**1/2 Mile Radius Map**  
Duchesne & Uintah Counties

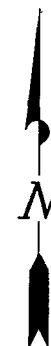
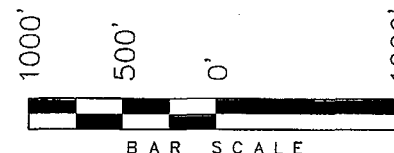
1001 17th Street Suite 2000  
Denver, Colorado 80202  
Phone: (303) 693-0102

March 13, 2012

*T9S, R16E, S.L.B.&M.*

*NEWFIELD PRODUCTION COMPANY*

WELL LOCATION, 9 MILE 1-20-9-16,  
LOCATED AS SHOWN IN THE NE 1/4 NE  
1/4 OF SECTION 20, T9S, R16E,  
S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF No. 189377

STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 100330  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED:  
12-31-05

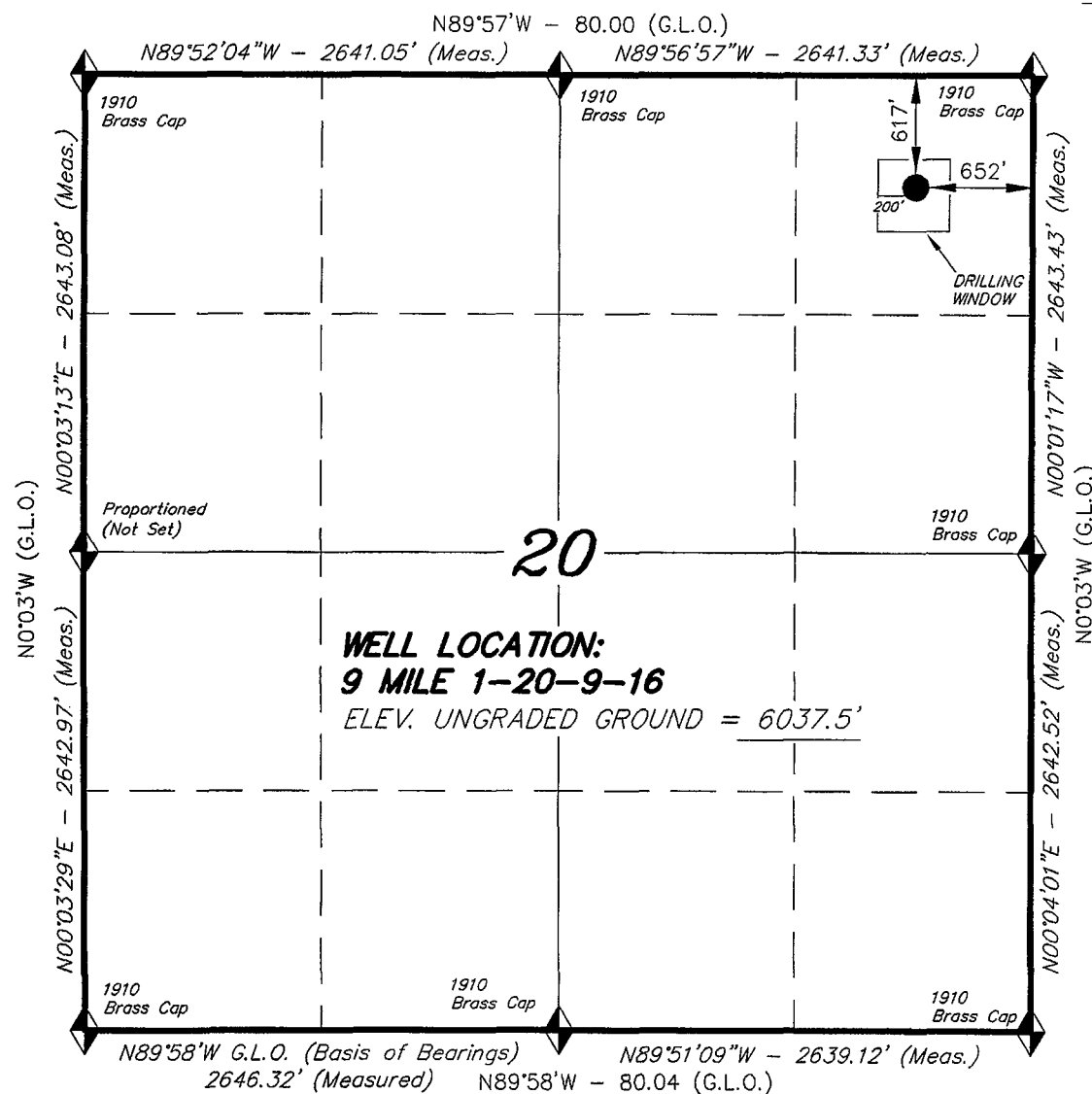
SURVEYED BY: C.M.

DATE DRAWN:  
01-04-06

DRAWN BY: L.C.S.

REVISÉ:

SCALE: 1" = 1000'



 = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SW)

9 MILE 1-20-9-16  
(Surface Location) NAD 83  
LATITUDE = 40° 01' 18.99"  
LONGITUDE = 110° 08' 09.95"

**EXHIBIT B**

#	Legal Description	Lessor & Expiration	Lessee & Operating Rights	Surface Owner
1	T9S-R16E SLM Section 17: S2 Section 20: N2	USA UTU-52018 HBP	Newfield Production Company Newfield RMI LLC	USA
2	T9S-R16E SLM Section 19: E2SW, SE, LOTS 3, 4 Section 20: S2 Section 29: All Section 30: All	USA UTU-74391 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	
3	T9S-R16E SLM Section 21: S2 Section 22: NENE, S2 Section 23: SWSW Section 24: SESE Section 26: NENE Section 27: All Section 28: All	USA UTU-74392 HBP	Newfield Production Company Newfield RMI LLC ABO Petroleum Corp MYCO Industries Inc OXY Y-1 Company Yates Petroleum Corp	USA
4	T9S-R16E SLM Section 16: All	State of Utah ML- 16532 HBP	Newfield RMI LLC QEP Energy Company El Paso E&P Company LP American Petroleum Corp Brave River Production Trans Republic Resources Inc	STATE of UTAH
5	T9S-R16E SLM Section 8: SWNE, SE Section 9: SWSW Section 17: NE	USA UTU-64379 HBP	Newfield Production Company Newfield RMI LLC Yates Petroleum Corp	USA

Section 18: E2SW, SE, LOTS 3,4

Section 19: NE, E2NW, LOTS 1,2

Section 21: N2


Section 22: W2NE, SENE, NW

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well  
Federal #1-20-9-16

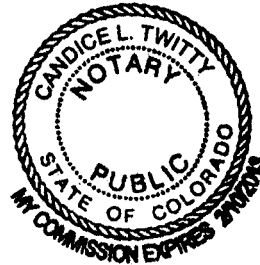
I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed:   
Newfield Production Company  
Eric Sundberg  
Regulatory Lead

Sworn to and subscribed before me this 30<sup>th</sup> day of April, 2012.

Notary Public in and for the State of Colorado: Candice L. Twitty

My Commission Expires  
02/10/2013



## FEDERAL 1-20-9-16

Spud Date: 05/16/07  
Put on Production: 07/25/07  
GL: 6038' KB: 6050'

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (312.36')  
DEPTH LANDED: 324.21' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 137 jts. (6015.83')  
DEPTH LANDED: 6029.08' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 60'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 179 jts (5506.29')  
TUBING ANCHOR: 5518.29' KB  
NO. OF JOINTS: 1 jts (30.52')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5551.61' KB  
NO. OF JOINTS: 2 jts (61.81')  
TOTAL STRING LENGTH: EOT @ 5614.97' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM polished rods  
SUCKER RODS: 1-2', 4', 6' & 8' x 3/4" pony rods, 100-3/4" guided rods, 95-3/4" slick rods, 20-3/4" guided rods, 6-1 1/2" x 25' weight rods.  
PUMP SIZE: CDI 2-1/2" x 1-1/2" x 16' x 20" RHAC  
STROKE LENGTH: 120"  
PUMP SPEED, 5 SPM:

FRAC JOB

07/19/07 5526-5544' **Frac CP1 sands as follows:**  
40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.

07/19/07 5124-5138' **Frac LODC sands as follows:**  
60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.

07/19/07 4780-4795' **Frac C sands as follows:**  
60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.

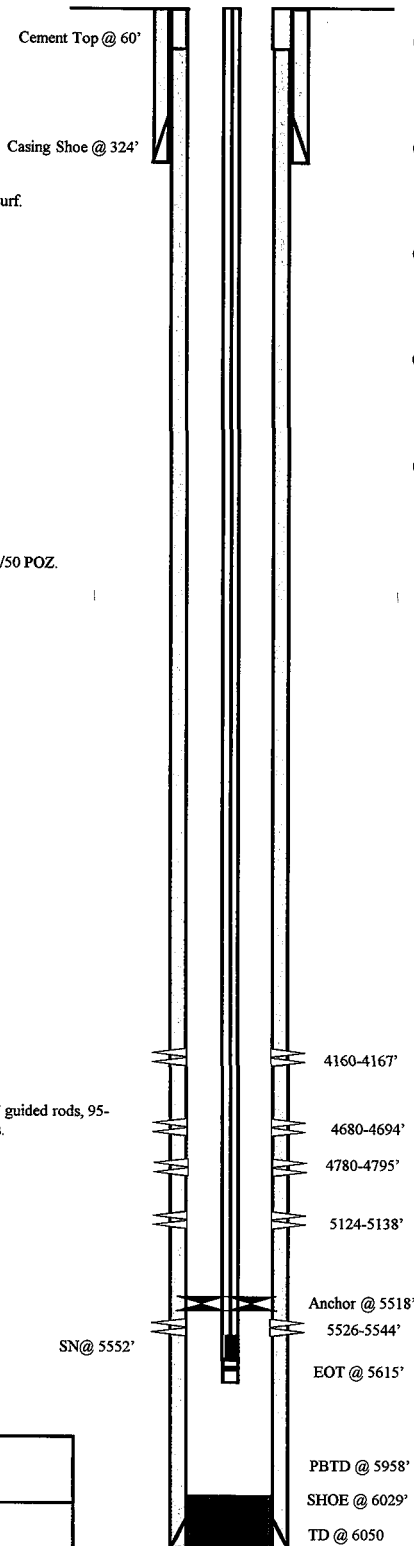
07/19/07 4680-4694' **Frac D2 sands as follows:**  
79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal.

07/20/07 4160-4167' **Frac GB6 sands as follows:**  
25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal.

1/26/09 Pump Change. Updated r & t details.

PERFORATION RECORD

07/10/07 5526-5544' 4 JSPF 72 holes  
07/19/07 5124-5138' 4 JSPF 56holes  
07/19/07 4780-4795' 4 JSPF 60 holes  
07/19/07 4680-4694' 4 JSPF 56 holes  
07/19/07 4160-4167' 4 JSPF 28 holes



NEWFIELD

FEDERAL 1-20-9-16

617'FNL &amp; 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

## Federal 9-17-9-16

Spud Date: 9-11-06  
Put on Production: 11-01-06  
GL: 5953' KB: 5965'

Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts (310.22')  
DEPTH LANDED: 322.07' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 139 jts. (6032.96')  
DEPTH LANDED: 6044.21' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP AT: 30'

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 175 jts (5485.5')  
TUBING ANCHOR: 5485.5' KB  
NO. OF JOINTS: 2 jts (63.0')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5551.2' KB  
NO. OF JOINTS: 2 jts (63.1')  
TOTAL STRING LENGTH: EOT @ 5616' KB

**SUCKER RODS**

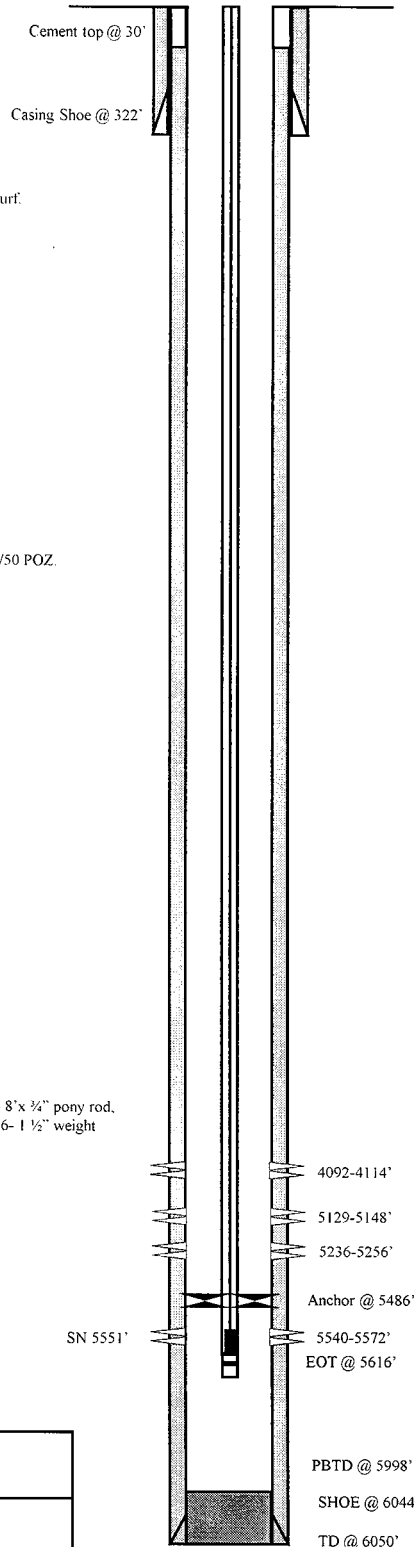
POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1- 2' x 3/4" pony rod, 1- 6' x 3/4" pony rod, 1- 8' x 3/4" pony rod,  
99- 3/4" guided rods, 86- 3/4" guided rods, 30- 3/4" guided rods, 6- 1 1/2" weight  
bars  
PUMP SIZE: 2-1/2" x 1-1/2" x 12' x 16' RHAC pump  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 5 SPM

**FRAC JOB**

10-27-06	5540-5572'	<b>Frac CP1 sands as follows:</b> 89695# 20/40 sand in 672 bbls Lightning 17 frac fluid. Treated @ avg press of 1635 psi w/avg rate of 24.9 BPM. ISIP 2000 psi. Calc flush: 5040 gal. Actual flush: 5538 gal.
10-27-06	5236-5256'	<b>Frac LODC sands as follows:</b> 80345# 20/40 sand in 604 bbls Lightning 17 frac fluid. Treated @ avg press of 2685 psi w/avg rate of 27.3 BPM. ISIP 2560 psi. Calc flush: 4746 gal. Actual flush: 5234 gal.
10-27-06	5129-5148'	<b>Frac A 3 sands as follows:</b> 80324# 20/40 sand in 597 bbls Lightning 17 frac fluid. Treated @ avg press of 2175 psi w/avg rate of 24.7 BPM. ISIP 2240 psi. Calc flush: 4923 gal. Actual flush: 4410 gal.
10-27-06	4092-4114'	<b>Frac GB4 sands as follows:</b> 38251# 20/40 sand in 358 bbls Lightning 17 frac fluid. Treated @ avg press of 1410 w/ avg rate of 14.3 BPM. ISIP 1490 psi. Calc flush: 4485 gal. Actual flush: 4410 gal.
2/23/07		<b>Pump Change.</b> Rod & Tubing detail updated.
05/27/08		updated rod and tubing detail
11/23/09		Pump change. Updated rod and tubing detail.

**PERFORATION RECORD**

10-17-06	5540-5572'	4 JSPF	128 holes
10-27-06	5236-5256'	4 JSPF	80 holes
10-27-06	5129-5148'	4 JSPF	76 holes
10-27-06	4092-4114'	4 JSPF	88 holes

**Federal 9-17-9-16**

2108' FSL &amp; 636' FEL

NE/SE Section 17-T9S-R16E

Duchesne Co, Utah

API # 43-013-33032; Lease # UTU-52018

## Federal 15-17-9-16

Spud Date: 08/18/06  
Put on Production: 10/13/06  
K.B.: 6000, G.L5988

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (310.18')  
DEPTH LANDED: 322.03' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 6 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 136 jts. (5986.81')  
DEPTH LANDED: 6000.06' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP: 60'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 183 jts (5785.5')  
TUBING ANCHOR: 5785.5' KB  
NO. OF JOINTS: 1 jts (31.7')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5820.1' KB  
NO. OF JOINTS: 2 jts (63.4')  
TOTAL STRING LENGTH: EOT @ 5885' KB

SUCKER RODS

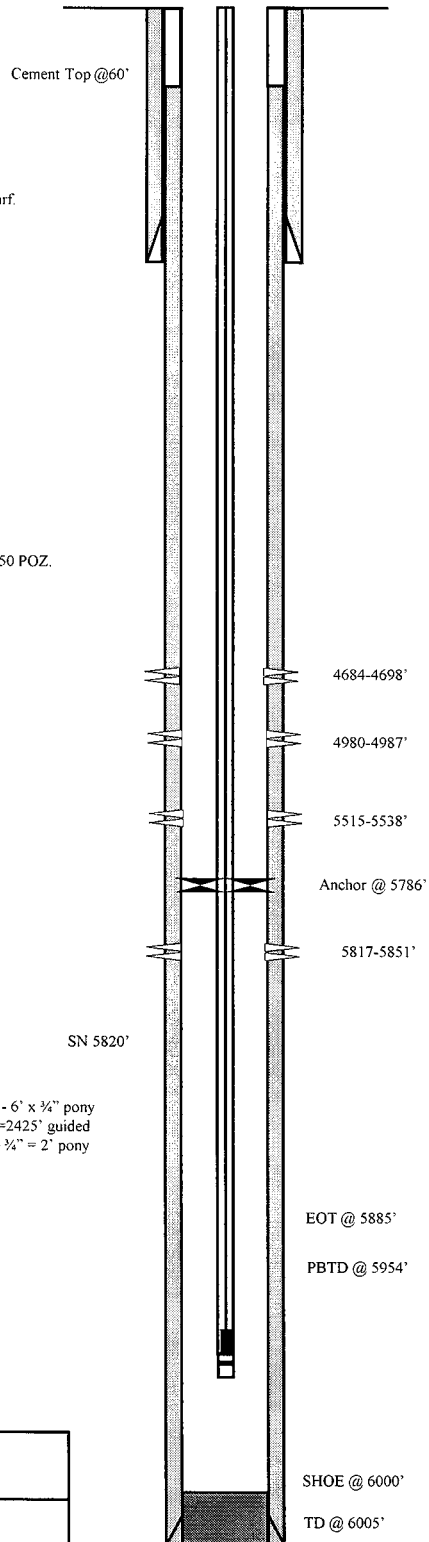
POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1-2' x 3/4" pony rods, 1-4' x 3/4" pony rod, 1-6' x 3/4" pony rod, 1-8' x 3/4" pony rod, 98- 3/4" = 2450' guided rods, 97- 3/4" = 2425' guided rods, 30- 3/4" = 750' guided rods, 6- 1 1/4" = 150' weight bars, 1 - 3/4" = 2' pony rod.  
PUMP SIZE: 2-1/2" x 1-1/2" x 17'  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 4.5

FRAC JOB

10/10/06	5817-5851'	<b>Frac CP5 sands as follows:</b> 89648# 20/40 sand in 681 bbls Lightning 17 frac fluid. Treated @ avg press of 1910 psi w/avg rate 25.3 BPM. ISIP 2250 psi. Calc flush: 5849 gal. Actual flush: 5309 gal.
10/10/06	5515-5538'	<b>Frac CP1 sands as follows:</b> 60364# 20/40 sand in 493 bbls Lightning 17 frac fluid. Treated @ avg press of 1727 psi w/avg rate of 25.1 BPM. ISIP 2120 psi. Calc flush: 5536 gal. Actual flush: 4998 gal.
10/11/06	4980-4987'	<b>Frac A.5 sands as follows:</b> 29934# 20/40 sand 393 bbls Lightning 17 frac fluid. Treated @ avg press of 2320 psi w/avg rate of 25 BPM. ISIP 2500 psi. Calc flush: 4985 gal. Actual flush: 4473 gal.
10/11/06	4684-4698'	<b>Frac D3 sands as follows:</b> 87753# 20/40 sand in 610 bbls Lightning 17 frac fluid. Treated @ avg press of 1960 psi w/avg rate of 25 BPM. ISIP 2250 psi. Calc flush: 4696 gal. Actual flush: 4578 gal.
11/30/06	Pump Change	Rod & Tubing Detail updated.
05/02/08	Stuck Pump	Tubing detail updated.
3/19/10		Pump change. Updated rod and tubing detail.
11/24/2011		<b>Pump Change.</b> Updated rod & tubing detail.

PERFORATION RECORD

10/05/06	5817-5851'	2 JSPF	68 holes
10/10/06	5515-5538'	4 JSPF	92 holes
10/11/06	4980-4987'	4 JSPF	28 holes
10/11/06	4684-4698'	4 JSPF	56 holes



Federal 15-17-9-16

810' FSL &amp; 1961' FEL

SW/SE Section 17-T9S-R16E

Duchesne Co, Utah

API #43-013-33037; Lease #UTU-52018

## Federal 7-20-9-16

Spud Date: 6-6-07

Put on Production: 8-12-05

GL: 6078' KB: 6090'

Injection Wellbore  
DiagramSURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jnts (306 9')

DEPTH LANDED: 318.75' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 1343 jts (5918 61')

DEPTH LANDED: 5931 86' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed &amp; 425 sxs 50/50 POZ

CEMENT TOP AT: 48'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

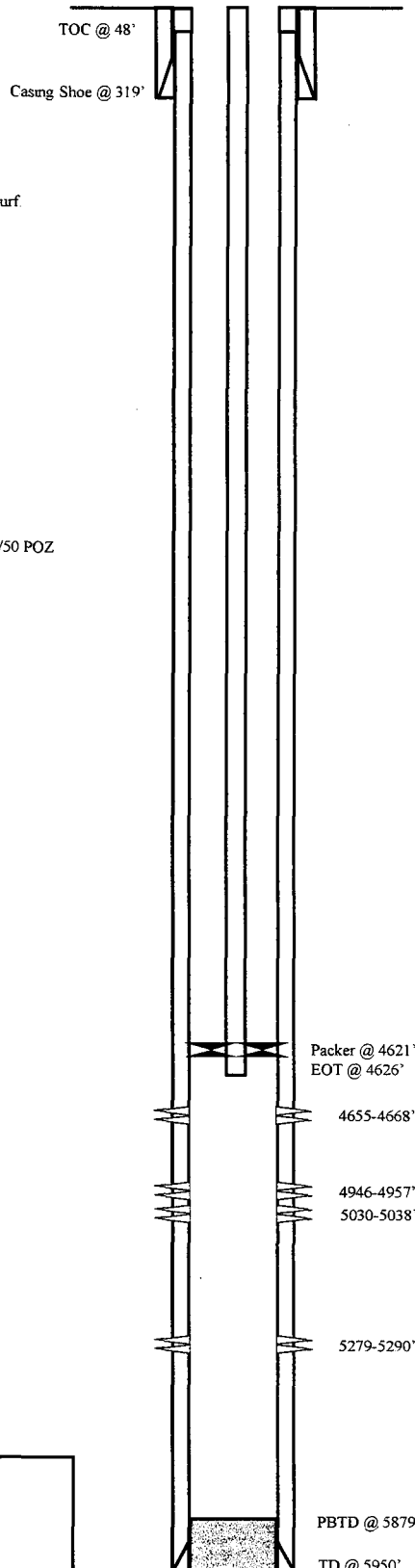
NO. OF JOINTS: 146 jts (4605')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 4617' KB

ARROW #1 PKR CE @ 4621.42'

TOTAL STRING LENGTH: EOT @ 4626'

FRAC JOB

7-9-07 5279-5290'

**Frac LODC, sands as follows:**

29,554# 20/40 sand in 370 bbls Lightning 17 frac fluid. Treated @ avg press of 1987 psi w/avg rate of 24.7 BPM. ISIP 2284 psi. Calc flush: 5277 gal. Actual flush: 4746 gal.

7-9-07 5030-5038'

**Frac LODC sands as follows:**

24,274# 20/40 sand in 368 bbls Lightning 17 frac fluid. Treated @ avg press of 2044 psi w/avg rate of 24.7 BPM. ISIP 2143 psi. Calc flush: 5028 gal. Actual flush: 4557 gal.

7-9-07 4946-4957'

**Frac A3 sands as follows:**

40,017# 20/40 sand in 427 bbls Lightning 17 frac fluid. Treated @ avg press of 1862 psi w/avg rate of 24.7 BPM. ISIP 2238 psi. Calc flush: 4944 gal. Actual flush: 4389 gal.

7-9-07 4655-4668'

**Frac D3 sands as follows:**

48,763# 20/40 sand in 450 bbls Lightning 17 frac fluid. 24.8 BPM. Calc flush: 4653 gal. Actual flush: 4578 gal.

6/9/09

**Stuck Pump:** Updated rod & tubing details.

5/26/11

**Pump Change:** Updated rod and tubing detail.

01/30/12

**Parted rods:** Updated rod and tubing detail.

3/12/12

**Pump change:** Updated rod & tubing detail.

5/9/12

**Convert to Injection Well**

5/11/12

**Conversion MIT Finalized** - update tbg detail.PERFORATION RECORD

7-3-07	5279-5290'	4 JSPF	44 holes
7-9-07	5030-5038'	4 JSPF	32 holes
7-9-07	4946-4957'	4 JSPF	44 holes
7-9-07	4655-4668'	4 JSPF	52 holes

**NEWFIELD****Federal 7-20-9-16**

2098' FNL &amp; 1961' FEL

SW/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33106; Lease #UTU-52018

## FEDERAL 8-20-9-16

Spud Date: 06/05/07  
Put on Production: 07/09/07  
GL: 6055' KB: 6067'

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (303.80')  
DEPTH LANDED: 313.8' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 4 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 134 jts. (5936.00')  
DEPTH LANDED: 5934.00' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 210'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 174 jts. (5422.3')  
TUBING ANCHOR: 5434.3' KB  
NO. OF JOINTS: 1 jt. (31.7')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5468.7' KB  
NO. OF JOINTS: 2 jts. (62.7')  
TOTAL STRING LENGTH: EOT @ 5533' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM polished rods  
SUCKER RODS: 100- 3/4" guided rods, 58- 3/4" sucker rods, 54- 3/4" guided rods,  
6- 1 1/2" weight bars  
PUMP SIZE: CDI 2-1/2" x 1-1/2" x 12' x 16' RHAC  
STROKE LENGTH:  
PUMP SPEED, SPM:

FRAC JOB

07/02/07 5484-5492' **Frac CP1 sands as follows:**  
15470# 20/40 sand in 274 bbls Lightning 17  
frac fluid. Treated @ avg press of 2490 psi  
w/avg rate of 24.6 BPM. ISIP 2369 psi. Calc  
flush: 5482 gal. Actual flush: 4981 gal.

07/02/07 5270-5280' **Frac LODC sands as follows:**  
29548# 20/40 sand in 365 bbls Lightning 17  
frac fluid. Treated @ avg press of 2397 psi  
w/avg rate of 24.4 BPM. ISIP 2486 psi. Calc  
flush: 5268 gal. Actual flush: 4796 gal.

07/02/07 5129-5176' **Frac LODC sands as follows:**  
4712# 20/40 sand in 389 bbls Lightning 17  
frac fluid. Blender Broke. Need to Refrac.  
ISIP 2340 psi. Calc flush: 5127 gal. Actual  
flush: 5292 gal.

07/03/07 5129-5176' **Frac LODC sands as follows:**  
95147# 20/40 sand in 706 bbls Lightning 17  
frac fluid. Treated @ avg press of 2554 psi  
w/avg rate of 24 BPM. ISIP 2775 psi. Calc  
flush: 5127 gal. Actual flush: 4662 gal.

07/03/07 5055-5074' **Frac LODC sands as follows:**  
71220# 20/40 sand in 719 bbls Lightning 17  
frac fluid. Treated @ avg press of 2372 psi  
w/avg rate of 24.3 BPM. ISIP 2680 psi. Calc  
flush: 5053 gal. Actual flush: 5095 gal.

07/03/07 4963-4971' **Frac A1 sands as follows:**  
40277# 20/40 sand in 492 bbls Lightning 17  
frac fluid. Treated @ avg press of 2725 psi  
w/avg rate of 24.5 BPM. ISIP 2290 psi. Calc  
flush: 4961 gal. Actual flush: 4452 gal.

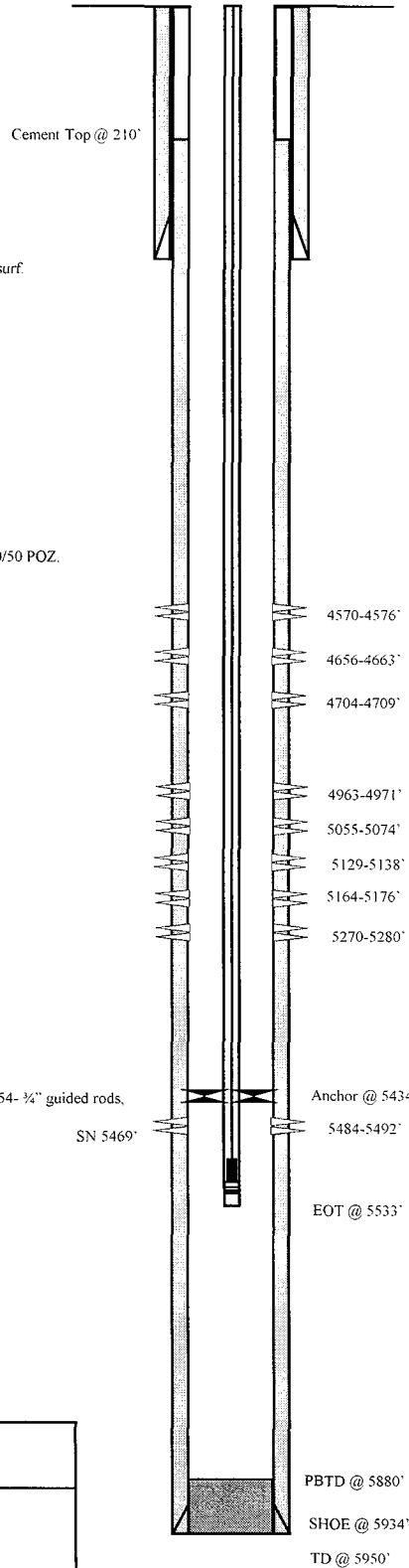
07/05/07 4656-4709' **Frac D3&C sands as follows:**  
29723# 20/40 sand in 376 bbls Lightning 17  
frac fluid. Treated @ avg press of 1630 psi  
w/avg rate of 24.5 BPM. ISIP 1700 psi. Calc  
flush: 4654 gal. Actual flush: 4200 gal.

07/05/07 4570-4576' **Frac D1 sands as follows:**  
42080# 20/40 sand in 356 bbls Lightning 17  
frac fluid. Treated @ avg press of 1829 psi  
w/avg rate of 24.4 BPM. ISIP 1875 psi. Calc  
flush: 4568 gal. Actual flush: 4494 gal.

2/10/09  
5/26/2010  
Pump Change. Updated r & t details.  
Tubing leak. Updated rod and tubing detail.

PERFORATION RECORD

06/28/07 5484-5492' 4 JSPF 32 holes  
07/02/07 5270-5280' 4 JSPF 40 holes  
07/02/07 5164-5176' 4 JSPF 48 holes  
07/02/07 5129-5138' 4 JSPF 36 holes  
07/03/07 5055-5074' 4 JSPF 76 holes  
07/03/07 4963-4971' 4 JSPF 32 holes  
07/03/07 4704-4709' 4 JSPF 20 holes  
07/03/07 4656-4663' 4 JSPF 28 holes  
07/05/07 4570-4576' 4 JSPF 24 holes



NEWFIELD

FEDERAL 8-20-9-16

2133'FNL &amp; 746' FEL

SE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33107; Lease # UTU-52018

# Federal 9-20-9-16

Attachment E-5

Spud Date: 6-14-07

Put on Production: 8-23-07

GL: 6095' KB: 6107'

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

### SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (302.22')

DEPTH LANDED: 313.12' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 8 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 156 jts. (6053.98')

DEPTH LANDED: 6067.23' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.

CEMENT TOP AT: 88'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 165 jts (5188.5')

TUBING ANCHOR: 5200.5' KB

NO. OF JOINTS: 2 jts (62.9')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5266.3' KB

NO. OF JOINTS: 2 jts (62.9')

TOTAL STRING LENGTH: EOT @ 5331.0' KB

### SUCKER RODS

POLISHED ROD: 1-1/2" x 26' SM

SUCKER RODS: 1-6' x 3/4" pony rod, 1-4' x 3/4" pony rod, 100-3/4" guided rods, 82-3/4" sucker rods, 22-3/4" guided rods, 6-1 1/2" weight bars

PUMP SIZE: 2-1/2" x 1-1/2" x 18" RHAC

STROKE LENGTH: 120"

PUMP SPEED, SPM: 5 SPM

### FRAC JOB

08-17-07 5248-5254'

**Frac LODC sands as follows:**

14994# 20/40 sand in 282 bbls Lightning 17 frac fluid. Treated @ avg press of 2477 psi w/avg rate of 24.8 BPM. ISIP 2540 psi. Calc flush: 5246 gal. Actual flush: 4704 gal.

08-17 5000-5028'

**Frac LODC sands as follows:**

151355# 20/40 sand in 1050 bbls Lightning 17 frac fluid. Treated @ avg press of 1647 psi w/avg rate of 24.8 BPM. ISIP 2100 psi. Calc flush: 4998 gal. Actual flush: 4494 gal.

08-17-07 4764-4774'

**Frac B.5 sands as follows:**

19761# 20/40 sand in 294 bbls Lightning 17 frac fluid. Treated @ avg press of 2232 psi w/avg rate of 24.8 BPM. ISIP 4148 psi. Calc flush: 4762 gal. Actual flush: 3839 gal.

08-17-07 4602-4611'

**Frac D2 sand as follows:**

45991# 20/40 sand in 435 bbls Lightning 17 frac fluid. Treated @ avg press of 2094 w/ avg rate of 24.8 BPM. ISIP 1850 psi. Calc flush: 4600 gal. Actual flush: 4515 gal.

2/1/2010

Pump change. Updated rod and tubing detail.

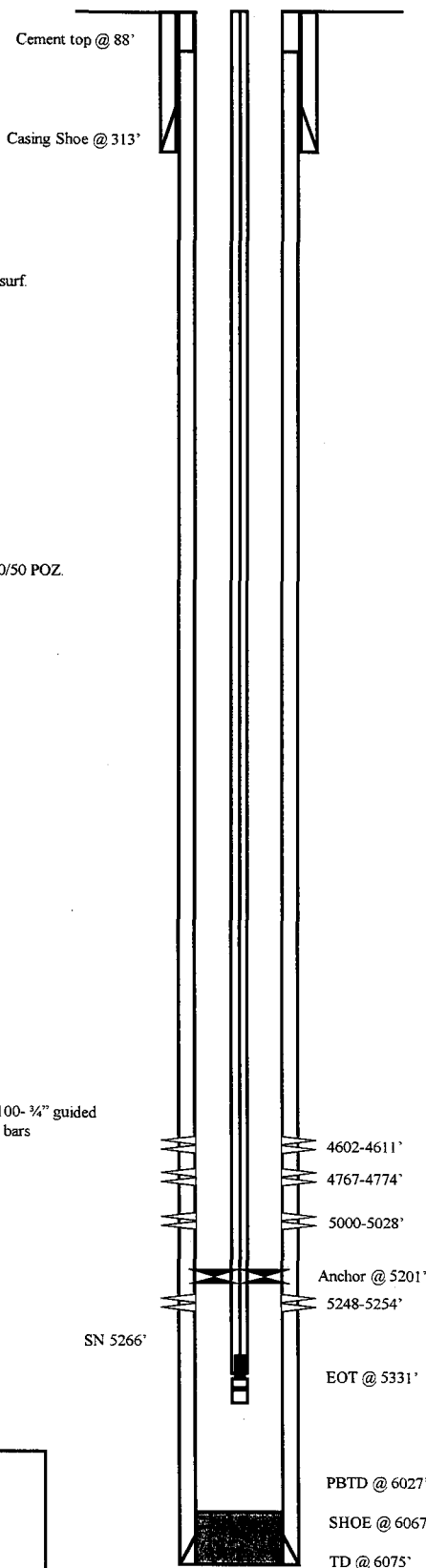
### PERFORATION RECORD

08-13-07 5248-5254' 4 JSPF 24 holes

08-17-07 5000-5028' 4 JSPF 112 holes

08-17-07 4767-4774' 4 JSPF 28 holes

08-17-07 4602-4611' 4 JSPF 36 holes



**NEWFIELD**



**Federal 9-20-9-16**

2011' FSL & 789' FEL (NE/SE)

Section 20, T9S, R16E

Duchesne County, Utah

API #43-013-33068; Lease # UTU-74391

## Federal 3-21-9-16

Spud Date: 10-24-06  
Put on Production: 12-7-06

GL: 5975' KB: 5987'

**SURFACE CASING**

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts (310.86')

DEPTH LANDED: 322.71' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 2 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 134 jts (5839.32')

DEPTH LANDED: 5852.57' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 300 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ

CEMENT TOP AT: 90'

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 170 jts (5464.16')

TUBING ANCHOR: 5476.16' KB

NO. OF JOINTS: 1 jts (31.59')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5510.55' KB

NO. OF JOINTS: 1 jts (33.42')

NO. OF JOINTS: 3 jts (95.00')

TOTAL STRING LENGTH: EOT @ 5646.27' KB

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM

SUCKER RODS: 1-8", & 1-4 x 1/4" pony rods, 99- 3/4" scraped rods, 95- 3/4" plain rods, 40- 3/4" scraped rods, 6-1 1/2" weight rods.

PUMP SIZE: 2-1/2" x 1-1/2" x 14' RHAC w/SM plunger

STROKE LENGTH: 86"

PUMP SPEED, SPM: 5 SPM

**Wellbore Diagram**

Cement top @ 90'

SN 5511'

Anchor @ 5476'

5500-5523'

EOT @ 5646'

5742-5755'

PBTD @ 5806'

SHOE @ 5852'

TD @ 5965'

Initial Production: BOPD,  
MCFD, BWPD

**FRAC JOB**

11-30-06	5742-5755'	<b>Frac CP4 sands as follows:</b> 29540# 20/40 sand in 399 bbls Lightning 17 frac fluid. Treated @ avg press of 2075 psi w/avg rate of 24.9 BPM. ISIP 2100 psi. Calc flush: 5740 gal. Actual flush: 5233 gal.
12-01-06	5500-5523'	<b>Frac CP1 sands as follows:</b> 89095# 20/40 sand in 713 bbls Lightning 17 frac fluid. Treated @ avg press of 1762 psi w/avg rate of 24.8 BPM. ISIP 1830 psi. Calc flush: 5498 gal. Actual flush: 4994 gal.
12-01-06	5194-5232'	<b>Frac LODC sands as follows:</b> 126238# 20/40 sand in 886 bbls Lightning 17 frac fluid. Treated @ avg press of 2565 psi w/avg rate of 24.7 BPM. ISIP 2450 psi. Calc flush: 5192 gal. Actual flush: 4675 gal.
12-01-06	4984-5002'	<b>Frac A1 sands as follows:</b> 18951# 20/40 sand in 288 bbls Lightning 17 frac fluid. Treated @ avg press of 2110 w/ avg rate of 24.9 BPM. ISIP 2130 psi. Calc flush: 4982 gal. Actual flush: 4519 gal.
12-01-06	4876-4881'	<b>Frac B2 sands as follows:</b> 12667# 20/40 sand in 262 bbls Lightning 17 frac fluid. Treated @ avg press of 2135 w/ avg rate of 25.0 BPM. ISIP 1710 psi. Calc flush: 4874 gal. Actual flush: 4788 gal.
03/10/07		Pump Change. Update rod and tubing details.
12/19/08		Tubing Leak. Updated rod & tubing details.
09/08/08		Parted Rods. Updated rod & tubing details.

**PERFORATION RECORD**

11-27-06	5742-5755'	4 JSPF	52 holes
11-30-06	5500-5523'	4 JSPF	92 holes
12-01-06	5212-5232'	4 JSPF	80 holes
12-01-06	5194-5205'	4 JSPF	44 holes
12-01-06	4984-5002'	4 JSPF	72 holes
12-01-06	4876-4881'	4 JSPF	20 holes

**NEWFIELD**

**Federal 3-21-9-16**

774' FNL & 1909' FWL

NE/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33019; Lease # UTU-64379

## Federal 4-21-9-16

Spud Date: 10-25-06  
Put on Production: 12-12-06  
GL: 5991' KB: 6003'

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts (310.54')  
DEPTH LANDED: 322.39' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 3 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 135 jts (5924.58')  
DEPTH LANDED: 5937.83' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 300 sxs Prem. Lite II mixed & 452 sxs 50/50 POZ.  
CEMENT TOP AT: 110'

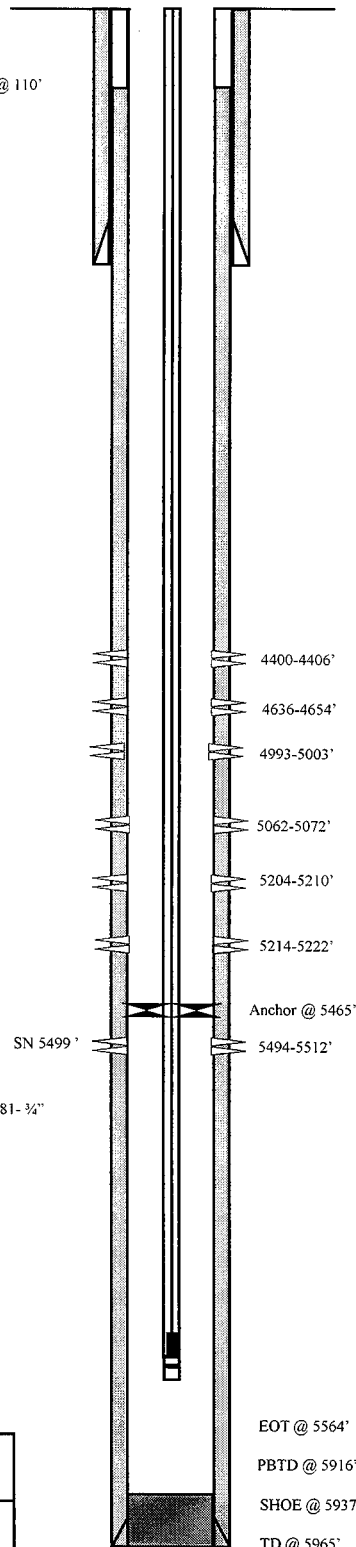
**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 173 jts (5453.00')  
TUBING ANCHOR: 5465.00' KB  
NO. OF JOINTS: 1 jts (31.52')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5499.32' KB  
NO. OF JOINTS: 2 jts (63.04')  
TOTAL STRING LENGTH: EOT @ 5563.91' KB

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 1-2', 4', 6', 8' x 3/4" pony rods, 99- 3/4" guided rods, 81- 3/4" plain rods, 32- 3/4" guided rods, 6- 1 1/2" weight rods.  
PUMP SIZE: 2-1/2" x 1-1/2" x 10' x 14' RHAC w/SM plunger  
STROKE LENGTH: 86"  
PUMP SPEED, SPM: 5 SPM

## Wellbore Diagram



Initial Production: BOPD,  
MCFD, BWPD

**FRAC JOB**

12-04-06 5494-5512' **Frac CPI sands as follows:**  
5213# 20/40 sand in 385 bbls Lightning 17 frac fluid. Treated @ avg press of 2157 psi w/avg rate of 25 BPM. ISIP 2550 psi. Calc flush: 5492 gal. Actual flush: 10458 gal.

12-04-06 5204-5222' **Frac LODC sands as follows:**  
23667# 20/40 sand in 320 bbls Lightning 17 frac fluid. Treated @ avg press of 2620 psi w/avg rate of 25 BPM. ISIP 2850 psi. Calc flush: 5202 gal. Actual flush: 4704 gal.

12-05-06 4993-5072' **Frac A3, A1 sands as follows:**  
117759# 20/40 sand in 829 bbls Lightning 17 frac fluid. Treated @ avg press of 2350 psi w/avg rate of 25 BPM. ISIP 2200 psi. Calc flush: 4991 gal. Actual flush: 4704 gal.

12-05-06 4636-4654' **Frac DS2 sands as follows:**  
80794# 20/40 sand in 588 bbls Lightning 17 frac fluid. Treated @ avg press of 1519 w/ avg rate of 25 BPM. ISIP 2000 psi. Calc flush: 4634 gal. Actual flush: 4158 gal.

12-05-06 4400-4406' **Frac PB11 sands as follows:**  
20165# 20/40 sand in 265 bbls Lightning 17 frac fluid. Treated @ avg press of 2077 w/ avg rate of 25 BPM. ISIP 1720 psi. Calc flush: 4398 gal. Actual flush: 4284 gal.

11/13/08 Parted rods. Updated rod & tubing details.

**PERFORATION RECORD**

11-29-06	5494-5512'	4 JSPF	72 holes
12-04-06	5214-5222'	4 JSPF	32 holes
12-04-06	5204-5210'	4 JSPF	24 holes
12-04-06	5062-5072'	4 JSPF	40 holes
12-04-06	4993-5003'	4 JSPF	40 holes
12-05-06	4636-4654'	4 JSPF	72 holes
12-05-06	4400-4406'	4 JSPF	24 holes

**Federal 4-21-9-16**

851' FNL &amp; 782' FWL

NW/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33069; Lease # UTU-64379

## Federal 5-21-9-16

Spud Date: 10/21/06  
Put on Production: 12/02/06  
K.B.: 6048" G.L.: 6036"

## Wellbore Diagram

Initial Production: BOPD,  
MCFD, BWPD

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (310.62')  
DEPTH LANDED: 322.47' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 4 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 135 jts. (5927.96')  
DEPTH LANDED: 5941.21' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 450 sxs 50/50 POZ.  
CEMENT TOP: 50'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 175 jts (5640.6')  
TUBING ANCHOR: 5652.6' KB  
NO. OF JOINTS: 1 jts (31.6')  
SEATING NIPPLE: 2-7/8" (1.10')  
SN LANDED AT: 5687' KB  
NO. OF JOINTS: 1 jts (31.6')  
GAS ANCHOR: 5719.7'  
SEATING NIPPLE: 2-7/8" (1.2')  
NO. OF JOINTS: 3 jts (94.9')  
TOTAL STRING LENGTH: EOT @ 5822' KB

SUCKER RODS

POLISHED ROD: 1-1/2" x 33'  
SUCKER RODS: 1-4" x 3/4", 1 - 6 x 3/4", 1 - 8 x 3/4" pony rod; 99- 3/4" guided rods, 91 - 3/4" sucker rods, 30- 3/4" guided rods, 6- 1 1/2" weight bars  
PUMP SIZE: 2-1/2" x 1-3/4" x 20" x 24" RHAC w/SM plunger  
STROKE LENGTH: 74"  
PUMP SPEED, SPM: 5

FRAC JOB

11/22/06 5852-5860' **Frac CP5 sands as follows:**  
24030# 20/40 sand in 364 bbls Lightning 17 frac fluid. Treated @ avg press of 2590 psi w/avg rate of 24.8 BPM. ISIP 2850 psi. Calc flush: 5858 gal. Actual flush: 5334 gal.

11/22/06 5724-5732' **Frac CP4 sands as follows:**  
37476# 20/40 sand in 415 bbls Lightning 17 frac fluid. Treated @ avg press of 2400 psi w/avg rate of 24.9 BPM. ISIP 2500 psi. Calc flush: 5730 gal. Actual flush: 5216 gal.

11/22/06 5482-5502' **Frac CP1 sands as follows:**  
56615# 20/40 sand in 467 bbls Lightning 17 frac fluid. Treated @ avg press of 1940 psi w/avg rate of 24.9 BPM. ISIP 2200 psi. Calc flush: 5500 gal. Actual flush: 4977 gal.

11/24/06 4584-4652' **Frac D1, D2 sands as follows:**  
156867# 20/40 sand in 1002 bbls Lightning 17 frac fluid. Treated @ avg press of 1675 psi w/avg rate of 25.1 BPM. ISIP 1960 psi. Calc flush: 4650 gal. Actual flush: 4494 gal.

03/21/07 **Pump Change:** Updated rod and tubing detail.

6/1/2010 **Pump change.** Updated rod and tubing detail.

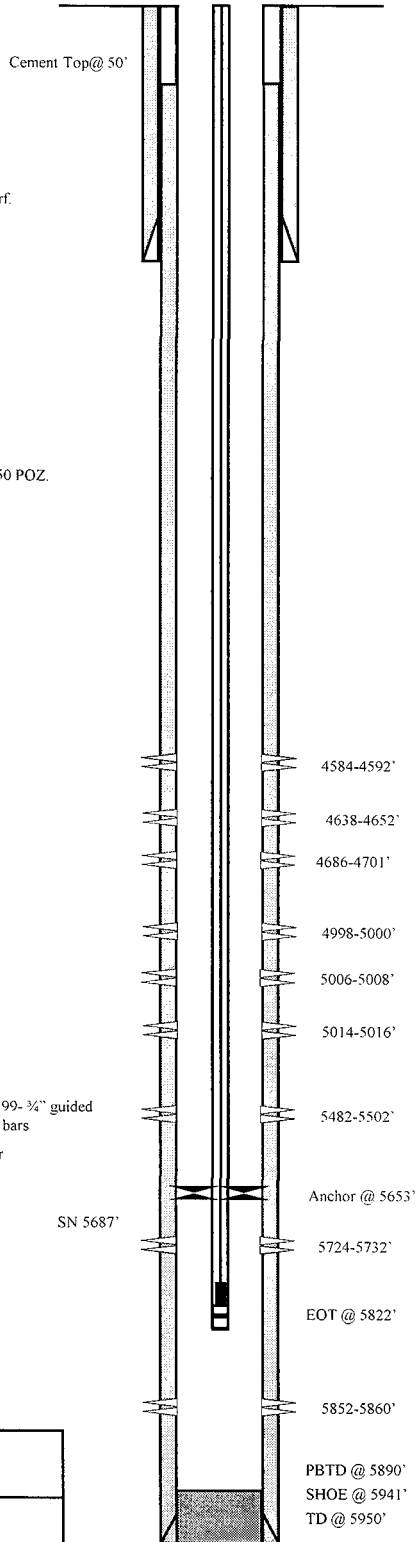
9/7/2010 **Pump change.** Updated rod and tubing detail.

10/22/10 4998-5016' **Frac A3 sands as follows:**  
61766# 20/40 sand in 501 bbls Lightning 17 frac fluid.

10/25/10 **Re-Completion**

PERFORATION RECORD

11/09/06	5852-5860'	4 JSPF	32 holes
11/22/06	5724-5732'	4 JSPF	32 holes
11/22/06	5482-5502'	4 JSPF	80 holes
11/24/06	4686-4701'	4 JSPF	60 holes
11/24/06	4638-4652'	4 JSPF	56 holes
11/24/06	4584-4592'	4 JSPF	32 holes
10/22/10	5014-5016'	3 JSPF	6 holes
10/22/10	5006-5008'	3 JSPF	6 holes
10/22/10	4998-5000'	3 JSPF	6 holes



Federal 5-21-9-16

2033' FNL &amp; 551' FWL

SW/NW Section 21-T9S-R16E

Duchesne Co, Utah

API # 43-013-33020; Lease # UTU-64379

## NGC Fed. 31-20G-9-16

Spud Date: 1/04/85  
Put on Production: 4/08/85  
GL: 6051' KB: 6030'

Initial Production: 88 BOPD,  
62 MCFPD, 21 BWPD

## Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: K-55  
WEIGHT 24#  
LENGTH: 7 jts. (319.75')  
DEPTH LANDED: 319'  
HOLE SIZE 12-1/4"  
CEMENT DATA: 250 sxs Class "H"

PRODUCTION CASING

CSG SIZE: 5-1/2" / J-55 LT&C / 15.5#  
LENGTH: 74 jts.  
CSG SIZE: 5-1/2" / K-55 / 15.5#  
LENGTH: 74 jts.  
DEPTH LANDED: 6118'  
HOLE SIZE 7-7/8"  
CEMENT DATA: 240 sxs Lite, tail w/ 570 sxs Class "H"  
CEMENT TOP AT: 2450' per CBL

TUBING

SIZE/GRADE/WT: 2-7/8" / N-80 / 6.5#  
NO. OF JOINTS: 172 jts. (5457.93')  
TUBING ANCHOR: 5469.93' KB  
NO. OF JOINTS: 2 jts (62.00')  
SN LANDED AT: 1 10' x 2 7/8" (5533.03') KB  
NO. OF JOINTS: 1 jt (31.90')  
TOTAL STRING LENGTH: 5564.93' KB

SUCKER RODS

POLISHED ROD: 1-1/4" X 22'  
SUCKER RODS: 4 - 1-1/2" weight rods, 154 - 3/4" slick rods, 61 - 7/8" guided rods, 1-4', 1-6', 1-10' x 7/8" pony rods.  
PUMP SIZE: 2-1/2" x 1-1/2" x 16' RHAC  
STROKE LENGTH:  
PUMP SPEED:  
LOGS: DIL, LDT-CNL, EPT, LSS, GR, SP, ABCL, CBL

FRAC JOB

3/10/85 5530'-5556' **Frac zone as follows:**  
120,000# 20/40 sand + 30,000# 12/20 sand in 1263 bbl gel. Average treating pressure 2800 psi at 20 BPM. ISIP 2500 psi. Calc. flush: 5530 gal. Actual flush: 3654 gal. 3/10/85

3/17/85 4760'-4780' **Frac zone as follows:**  
45,000# 20/40 sand + 12,135# 12/20 sand in 1112 bbl gel. Average treating pressure 3100 psi at 20 BPM. ISIP 1800 psi. Calc. flush: 4760 gal. Actual flush: 1260 gal.

3/26/85 4692'-4702' **Frac zone as follows:**  
32,000# 20/40 sand + 14,000# 12/20 sand in 581 bbl gel. Average treating pressure 3200 psi at 25 BPM. ISIP 2000 psi. Calc. flush: 4692 gal. Actual flush: 3444 gal.

1/31/98 5082'-5105' **Frac zone as follows:**  
120,000# 20/40 sand in 489 bbl gel. Average treating pressure 6600 psi at 24.8 BPM. ISIP 4693 psi. Calc. flush: 1317 gal. Actual flush: 1737 gal.

Cement Top @ 2450'

4692'-4702'

4760'-4780'

5082'-5092'

5095'-5105'

Anchor @ 5469'

5530'-5556'

PERFORATION RECORD

3/02/85	5530'-5556'	4 SPF	104 holes
3/13/85	4764'-4780'	4 SPF	64 holes
3/15/85	4760'-4780'	4 SPF	80 holes
3/23/85	4692'-4702'	4 SPF	40 holes
1/30/98	5082'-5092'	4 SPF	40 holes
1/30/98	5095'-5105'	4 SPF	40 holes

SN @ 5533' KB  
EOT @ 5564' KB  
PBTD @ 5991' KB  
TD @ 6150'



NGC Fed. #31-20G-9-16  
540' FNL & 1944' FEL  
NWNE Section 20-T9S-R16E  
Duchesne Co, Utah  
API #43-013-31071; Lease #U-52018

## State 13-16-9-16

Spud Date: 4/9/08

Put on Production: 6/18/08

GL: 5959' KB: 5971'

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7jts (313.38')

HOLE SIZE: 12-1/4"

CEMENT DATA: To Surface with 160 sx Class 'G' cmt

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 132jts

HOLE SIZE: 7-7/8"

DEPTH LANDED: 5763.29'

CEMENT DATA: 275 sx Premilite II and 400 sx 50/50 Poz

CEMENT TOP AT: 46'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 177 jts (5460.9')

TUBING ANCHOR: 5472.9'

NO. OF JOINTS: 1jt (31.70')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 5507.1'kb

NO. OF JOINTS: 1 jts (31.10')

TOTAL STRING LENGTH: EOT @ 5540

SUCKER RODS

POLISHED ROD: 1-1/2" x 26' polished rod

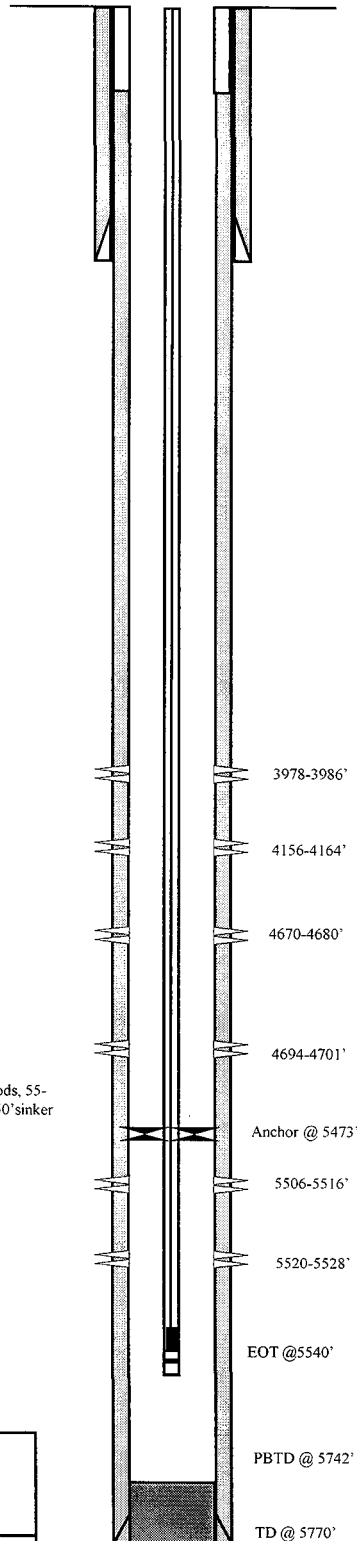
SUCKER RODS: 1 x 3/4" = 2' pony rods, 113-3/4" = 2825' guided rods, 55-3/4" = 1375' sucker rods, 41 -3/4" = 1025' guided rods, 6-1 1/2" = 150' sinker bars

PUMP SIZE: CDI 2-1/2" x 1-1/4" x 12" x 16' RHAC pump

STROKE LENGTH: 100"

PUMP SPEED, SPM: 4

Wellbore Diagram

FRAC JOB

06-06-08 5506-5616' **Frac CP1 sds as follows:**  
40,770# 20/40 sand in 426 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1994 psi w/ ave rate of 23.8 BPM. ISIP 2188 psi. Actual Flush: 4914 gals.

06-06-08 4670-4680' **Frac D2 sds as follows:**  
40,545# 20/40 sand in 410 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1811 psi w/ ave rate of 23.8 BPM. ISIP 1920 psi. Actual Flush: 4120 gals.

06-06-08 4156-4164' **Frac GB6 sds as follows:**  
50,204# 20/40 sand in 438 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1855 psi w/ ave rate of 24.0 BPM. ISIP 1810 psi. Actual Flush: 3692 gals.

06-06-08 3978-3986' **Frac GB2 sds as follows:**  
30,226# 20/40 sand in 366 bbls of Lightning 17 fluid. Treated w/ ave pressure of 1552 psi w/ ave rate of 15.6 BPM. ISIP 1587 psi. Actual Flush: 3893 gals.

1/6/09 Tubing Leak. Updated rod & tubing details.  
9/30/09 Tubing Leak. Updated rod & tubing  
07/24/10 Pump Change. Updated rod & tubing.  
4/19/2011 Tubing Leak. Updated rods & tubing.

PERFORATION RECORD

3978-3986'	4 JSPF	32 holes
4156-4164'	4 JSPF	32 holes
4670-4680'	4 JSPF	40 holes
4694-4701'	4 JSPF	28 holes
5506-5516'	4 JSPF	40 holes
5520-5528'	4 JSPF	32 holes

**NEWFIELD**

State 13-16-9-16  
652' FSL & 524' FWL  
SW/SW Section 16-T9S-R16E  
Duchesne Co, Utah  
API #43-013-33853; Lease #Utah State ML-16532

GMB 3-16-9-16H

Wellbore Diagram



Surface Location: NE/NW, Sec 16, T9S R16E

County/State: Greater Monument Butte, Duchesne County, Utah

Elevation: 5847' GL + 12' KB API: 43-013-50441

8-5/8" Casing Shoe 1,025	Casing Detail		Size	Wt.	Grade	Conn.	Top	Bottom	Burst	Collapse	ID	Drift	bbl/ft	Hole	TOC
	Surface		8-5/8"	24#	J-55	LTC	0	1,025							Surface
	Production		5-1/2"	17#	M-80	LTC	0	5,993	7,740	7,020	4.892	4.767	0.0233	7-7/8"	Port Collar: 5,654'nd to Surface
	Production		4-1/2"	11.6#	P-110	LTC	5,993 TVD	10,249 6,011	7,774	8,510	4.000	3.875	0.0155	6-1/8"	

burst &amp; collapse values are book, no additional safety factors have been applied

Tubing Detail	Size	Wt.	Grade	Conn.	Length	Top	Bottom	Joints
TBG DETAIL: sand drain valve, 3 jts 2 7/8" tbg., Cavins De-sander, 2 7/8" sub, 1 jt 2 7/8" tbg., SN, 1 jt 2 7/8" tbg., 5 1/2" TAC, 187 jts 2 7/8" tbg and tbg hanger. TA @ 5,870'. SN @ 5,903'. EOT @ 6,052' NOTE on Tubing Anchor: TA (shortened inner springs & beveled outer springs--4.625" OD)								

WELLBORE FLUIDS  
Lateral section fluid= +8.4 ppg "clean" brine

Rod Detail	Size	Grade	Count	Length	Top	Bottom
Pump and Rod Detail: Weatherford MacGyver 1 3/4" x 28' rod pump, stabilizer sub, on/off tool, stabilizer sub, SE 4 Co-rod, 1- 8', 6', 4', 2' x 7/8" pony rods, 1 1/2" x 26' polished rod NOTE on Pump: with CoRod, must have Clutch (on/off tool) installed.						

Proposed Frac Data			Packers Plus 12 Stage StackFrac HD Stimulation Liner										Prop Vol (lbs)	Total Clean Vol (bbls)	
	Top	Bottom									Prop type/ size				
Toe Section	10,249	10,249	Packers Plus 4-1/2" Toe Circulating Sub w/1,000" Seat for 1,250" SF2 High Pressure Ball (Actuated at 1,098 psi). And Open Hole TD												
Stage 1	10,087	10,249	Dual Hydraulic Frac Port:	Depth 10,160	Ball OD (in.) NA	Seat ID (in.) NA	Vol. to Seat (bbl) 204.33	Actual Vol. (bbl) NA	Difference (bbl)	Ball Action (ΔP)	100 mesh sand	0			
OH Anchor/Packer	10,080	10,087	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								30/50 mesh sand	0	1,903		
Mechanical Packer 1	10,002	10,007	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	34,144	2,342		
Stage 2	9,682	10,002	FracPort 2:	Depth 9,641	Ball OD (in.) 2,125	Seat ID (in.) 2,000	Vol. to Seat (bbl) 199.39	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	30,760			
Mechanical Packer 2	9,677	9,682	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	36,389	2,775		
Stage 3	9,914	9,677	FracPort 3:	Depth 9,617	Ball OD (in.) 2,250	Seat ID (in.) 2,125	Vol. to Seat (bbl) 194.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	18,835			
Mechanical Packer 3	9,354	9,359	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	7,548	2,716		
Stage 4	9,035	9,354	FracPort 4:	Depth 9,193	Ball OD (in.) 2,375	Seat ID (in.) 2,250	Vol. to Seat (bbl) 189.36	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	0			
Mechanical Packer 4	9,030	9,035	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	28,177	4,116		
Stage 5	8,710	9,030	FracPort 5:	Depth 8,869	Ball OD (in.) 2,500	Seat ID (in.) 2,375	Vol. to Seat (bbl) 184.35	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	36,211			
Mechanical Packer 5	8,705	8,710	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	37,277	3,907		
Stage 6	8,386	8,705	FracPort 6:	Depth 8,544	Ball OD (in.) 2,625	Seat ID (in.) 2,500	Vol. to Seat (bbl) 179.32	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	30,591			
Mechanical Packer 6	8,361	8,386	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	32,229	2,784		
Stage 7	8,066	8,361	FracPort 7:	Depth 8,220	Ball OD (in.) 2,750	Seat ID (in.) 2,625	Vol. to Seat (bbl) 174.30	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	21,643			
Mechanical Packer 7	8,061	8,066	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	35,076	3,706		
Stage 8	7,743	8,061	FracPort 8:	Depth 7,901	Ball OD (in.) 2,875	Seat ID (in.) 2,750	Vol. to Seat (bbl) 169.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	30,420			
Mechanical Packer 8	7,738	7,743	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	30,308	2,777		
Stage 9	7,418	7,738	FracPort 9:	Depth 7,577	Ball OD (in.) 3,000	Seat ID (in.) 2,875	Vol. to Seat (bbl) 164.35	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	14,314			
Mechanical Packer 9	7,413	7,418	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	25,505	1,869		
Stage 10	6,768	7,413	FracPort 10:	Depth 7,252	Ball OD (in.) 3,125	Seat ID (in.) 3,000	Vol. to Seat (bbl) 159.32	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	3,467			
Mechanical Packer 10	7,088	7,093	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	37,984	2,804		
Stage 11	6,768	7,088	FracPort 11:	Depth 6,927	Ball OD (in.) 3,250	Seat ID (in.) 3,125	Vol. to Seat (bbl) 159.37	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	36,949			
Mechanical Packer 11	6,763	6,768	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								100 mesh sand	31,284	2,755		
Stage 12	6,445	6,763	FracPort 11:	Depth 6,601	Ball OD (in.) 3,375	Seat ID (in.) 3,250	Vol. to Seat (bbl) 154.29	Actual Vol. (bbl) 0.00	Difference (bbl)	Ball Action (ΔP)	30/50 mesh sand	21,198			
Mechanical Packer 12	6,438	6,445	Packer Plus 7" x 4-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,268psi)								Total Fluid				
OH Anchor/Packer	5,451	5,456	Packer Plus 8-5/8" x 5-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,049psi)								34,456				
Rockseal II Packer	5,372	5,377	Packer Plus 8-5/8" x 5-1/2" RockSeal II 10K Hydraulic Set Open Hole Packer (Actuated at 2,046psi)								(bbl)				
Lat Length		3,804										Sand Total	100 mesh sand	335,921	
Total Stim. Lateral		3,804										580,309	30/50 mesh sand	244,388	
Avg. Stage Length		317		*between packers								# sand per foot of lateral		153	

6.5"x4.5X XO 5,993

12

11

10

9

8

7

6

5

4

3

2

1

MD TD 10,259  
TVD TD 6,011

## Water Analysis Report

Production Company: NEWFIELD PRODUCTION

Sales Rep: Darren Betts

Well Name: SWDIF

Lab Tech: Gary Peterson

Sample Point: After production filter

Sample Date: 12/9/2011

Sample ID: WA-204150

Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations		Anions	
		mg/L		mg/L	
Test Date:	12/9/2011	Sodium (Na):	6799.09	Chloride (Cl):	10000.00
System Temperature 1 (°F):	300.00	Potassium (K):	26.10	Sulfate (SO <sub>4</sub> ):	2.00
System Pressure 1 (psig):	3000.00	Magnesium (Mg):	9.40	Bicarbonate (HCO <sub>3</sub> ):	1024.80
System Temperature 2 (°F):	70.00	Calcium (Ca):	26.80	Carbonate (CO <sub>3</sub> ):	0.00
System Pressure 2 (psig):	14.70	Strontium (Sr):	0.00	Acetic Acid (CH <sub>3</sub> COO)	0.00
Calculated Density (g/ml):	1.01	Barium (Ba):	24.20	Propionic Acid (C <sub>2</sub> H <sub>5</sub> COO)	0.00
pH:	8.20	Iron (Fe):	0.47	Butanoic Acid (C <sub>3</sub> H <sub>7</sub> COO)	0.00
Calculated TDS (mg/L):	17913.62	Zinc (Zn):	0.00	Isobutyric Acid ((CH <sub>3</sub> ) <sub>2</sub> CHCOO)	0.00
CO <sub>2</sub> in Gas (%):	0.00	Lead (Pb):	0.70	Fluoride (F):	0.00
Dissolved CO <sub>2</sub> (mg/L):	0.00	Ammonia NH <sub>3</sub> :	0.00	Bromine (Br):	0.00
H <sub>2</sub> S in Gas (%):	0.00	Manganese (Mn):	0.06	Silica (SiO <sub>2</sub> ):	0.00
H <sub>2</sub> S in Water (mg/L):	10.00				

## Notes:

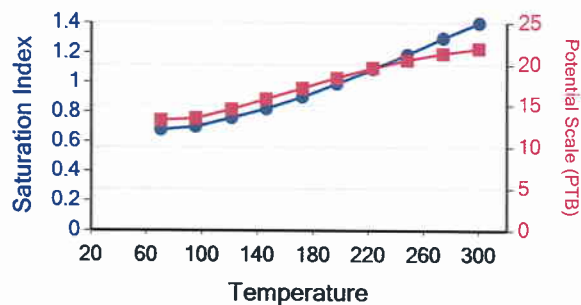
(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Celestite SrSO <sub>4</sub>		Halite NaCl		Zinc Sulfide	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	0.68	13.26	0.21	0.60	2.60	0.26	0.67	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.70	13.48	0.00	0.00	2.38	0.26	0.78	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.76	14.55	0.00	0.00	2.24	0.26	0.91	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.82	15.79	0.00	0.00	2.16	0.26	1.02	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.90	17.10	0.00	0.00	2.12	0.26	1.13	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.99	18.39	0.00	0.00	2.12	0.26	1.22	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	1.09	19.55	0.00	0.00	2.15	0.26	1.31	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	1.19	20.54	0.00	0.00	2.21	0.26	1.37	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	1.30	21.32	0.00	0.00	2.28	0.26	1.42	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	1.40	21.90	0.00	0.00	2.36	0.26	1.46	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

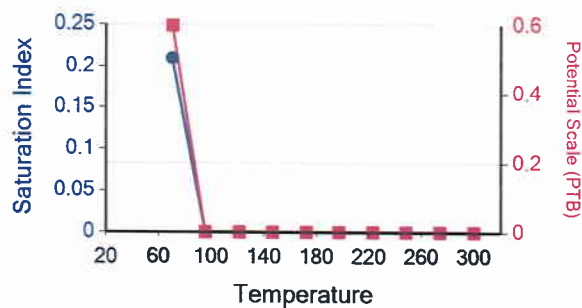
		Hemihydrate CaSO <sub>4</sub> ·0.5H <sub>2</sub> O		Anhydrate CaSO <sub>4</sub>		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
		SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
Temp (°F)	PSI																
70	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.45	0.28	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.59	0.28	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.89	0.28	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.76	0.28	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	0.28	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	0.28	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.60	0.28	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.30	0.28	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.03	0.28	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Lead Sulfide

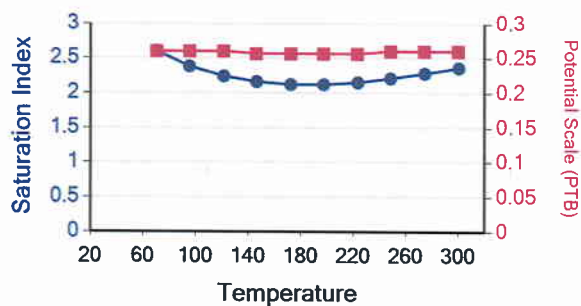
Calcium Carbonate



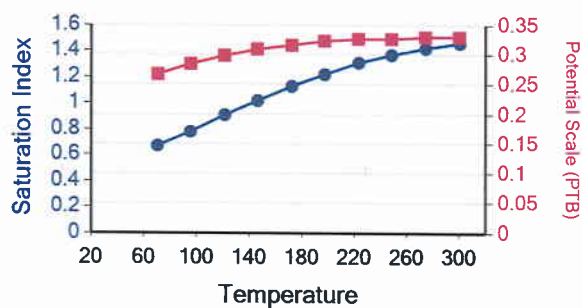
Barium Sulfate



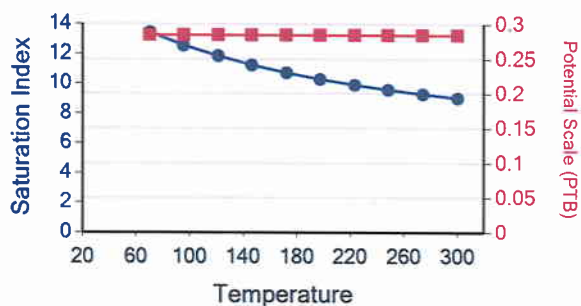
Iron Sulfide



Iron Carbonate



Lead Sulfide



## Water Analysis Report

Production Company: **NEWFIELD PRODUCTION**Sales Rep: **Darren Betts**Well Name: **FED 1-20-9-16**Lab Tech: **Gary Peterson**Sample Point: **Water leg**Sample Date: **3/15/2012**Sample ID: **WA-209564**Scaling potential predicted using ScaleSoftPitzer from  
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
		Cations	mg/L	Anions	mg/L
Test Date:	3/19/2012	Sodium (Na):	6379.81	Chloride (Cl):	9000.00
System Temperature 1 (°F):	300.00	Potassium (K):	51.60	Sulfate (SO4):	30.00
System Pressure 1 (psig):	3000.00	Magnesium (Mg):	9.10	Bicarbonate (HCO3):	1561.60
System Temperature 2 (°F):	70.00	Calcium (Ca):	9.30	Carbonate (CO3):	0.00
System Pressure 2 (psig):	14.70	Strontium (Sr):	0.00	Acetic Acid (CH3COO)	0.00
Calculated Density (g/ml):	1.01	Barium (Ba):	1.80	Propionic Acid (C2H5COO)	0.00
pH:	9.30	Iron (Fe):	0.20	Butanoic Acid (C3H7COO)	0.00
Calculated TDS (mg/L):	17043.55	Zinc (Zn):	0.02	Isobutyric Acid ((CH3)2CHCOO)	0.00
CO2 in Gas (%):	0.00	Lead (Pb):	0.09	Fluoride (F):	0.00
Dissolved CO2 (mg/L):	0.00	Ammonia NH3:	0.00	Bromine (Br):	0.00
H2S in Gas (%):	0.00	Manganese (Mn):	0.03	Silica (SiO2):	0.00
H2S in Water (mg/L):	0.50				

## Notes:

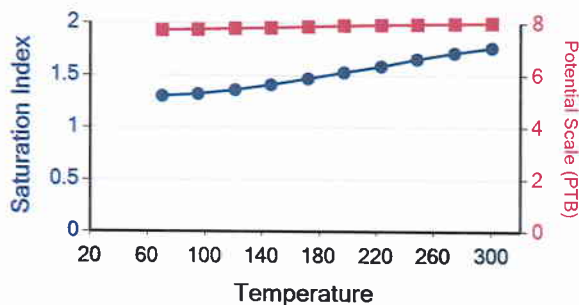
(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4·2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70	14	1.30	7.71	0.26	0.48	1.98	0.11	1.33	0.14	0.00	0.00	0.00	0.00	0.00	0.00	9.32	0.01
95	346	1.32	7.74	0.02	0.05	1.76	0.11	1.44	0.14	0.00	0.00	0.00	0.00	0.00	0.00	8.80	0.01
121	678	1.36	7.77	0.00	0.00	1.60	0.11	1.55	0.14	0.00	0.00	0.00	0.00	0.00	0.00	8.35	0.01
146	1009	1.41	7.81	0.00	0.00	1.49	0.11	1.65	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.96	0.01
172	1341	1.47	7.85	0.00	0.00	1.43	0.11	1.73	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.63	0.01
197	1673	1.53	7.89	0.00	0.00	1.40	0.11	1.80	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.35	0.01
223	2004	1.59	7.92	0.00	0.00	1.39	0.11	1.85	0.14	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.01
248	2336	1.66	7.95	0.00	0.00	1.39	0.11	1.88	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.01
274	2668	1.72	7.98	0.00	0.00	1.40	0.11	1.89	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.63	0.01
300	3000	1.77	8.00	0.00	0.00	1.41	0.11	1.87	0.14	0.00	0.00	0.00	0.00	0.00	0.00	6.41	0.01

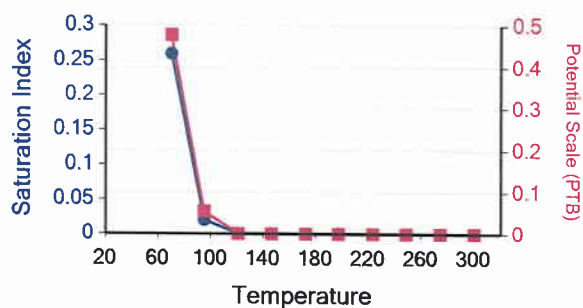
		Hemihydrate CaSO4~0.5H2O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
70	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.38	0.04	0.00	0.00	0.00	0.00	0.00	0.00
95	346	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.53	0.04	0.00	0.00	0.00	0.00	0.00	0.00
121	678	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.01	10.80	0.04	0.00	0.00	0.00	0.00	0.00	0.00
146	1009	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.01	10.17	0.04	0.00	0.00	0.00	0.00	0.00	0.00
172	1341	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.01	9.63	0.04	0.00	0.00	0.00	0.00	0.00	0.00
197	1673	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.01	9.15	0.04	0.00	0.00	0.00	0.00	0.00	0.00
223	2004	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.01	8.72	0.04	0.00	0.00	0.00	0.00	0.00	0.00
248	2336	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.01	8.33	0.04	0.00	0.00	0.00	0.00	0.00	0.00
274	2668	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.01	7.97	0.04	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.01	7.64	0.04	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Sulfide Iron Carbonate Zinc Sulfide Lead Sulfide

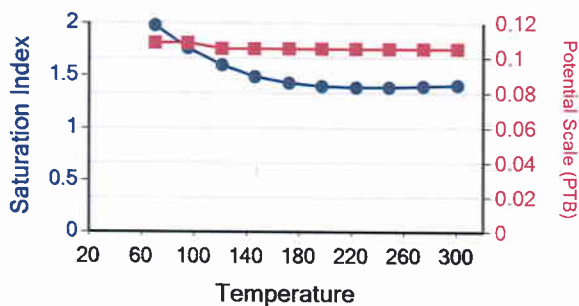
Calcium Carbonate



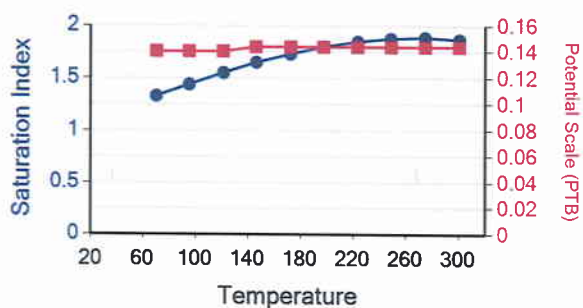
Barium Sulfate



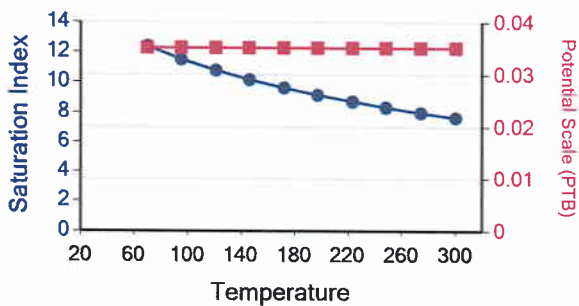
Iron Sulfide



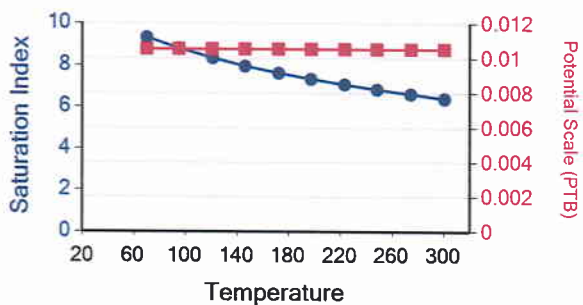
Iron Carbonate



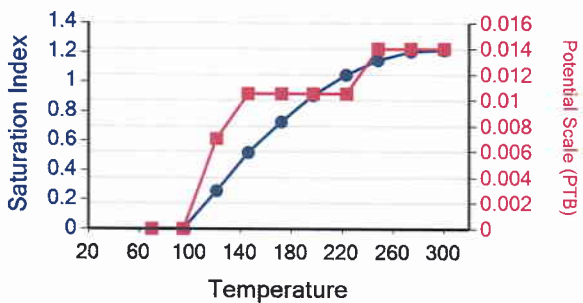
Lead Sulfide



Zinc Sulfide



Zinc Carbonate



**Attachment "G"**

**Federal #1-20-9-16  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Calculated Frac Gradient (psi/ft)	Pmax
Top	Bottom				
5526	5544	5535	2165	0.82	2129
5124	5138	5131	2760	0.97	2727
4780	4795	4788	1800	0.81	1769 ←
4680	4694	4687	1960	0.85	1930
4160	4167	4164	2025	0.92	1998
				<b>Minimum</b>	<u>1769</u>

**Calculation of Maximum Surface Injection Pressure**

$P_{max} = (\text{Frac Grad} - (0.433 \times 1.015)) \times \text{Depth of Top Perf}$   
 where pressure gradient for the fresh water is .433 psi/ft and  
 specific gravity of the injected water is 1.015.

$$\text{Frac Gradient} = (\text{ISIP} + (0.433 \times \text{Top Perf.})) / \text{Top Perf.}$$

**Please note:** These are existing perforations; additional perforations may be added during the actual conversion procedure.



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: 11-Jul-07

Day: 1

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: Wt:

Grd: Pkr/EOT @:

BP/Sand PBTD:

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: 10-Jul-07

SITP: SICP: 0

Install 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5929' & cement top @ 60' Perforate stage #1. CP1 sds @ 5526-44' w/ 3 1/8" Slick guns (19 gram, .49" HE, 120 , 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 72 shots. 143 BWTR. SIFN.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 143

Starting oil rec to date:

Fluid lost/recovered today: 0

Oil lost/recovered today:

Ending fluid to be recovered: 143

Cum oil recovered:

IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

Base Fluid used: Job Type:

Company:

Procedure or Equipment detail:

## COSTS

Weatherford BOP \$450

NPC NU crew \$300

NDSI trucking \$800

Perforators LLC \$6,800

Drilling cost \$328,488

Zubiate hot oil \$420

Location preparation \$300

NPC wellhead \$1,500

Benco - anchors \$1,200

Admin. Overhead \$3,000

NPC Supervisor \$300

Max TP: Max Rate: Total fluid pmpd:

Avg TP: Avg Rate: Total Prop pmpd:

ISIP: 5 min: 10 min: 15 min:

Completion Supervisor: Orson Barney

DAILY COST: \$343,558

TOTAL WELL COST: \$343,558



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16Report Date: July 20, 2007Day: 2Operation: CompletionRig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: Wt: Grd: Pkr/EOT @: BP/Sand PBTD:

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007SITP:  SICP: 0

## Day 2(a):

NU BJ Services "Ram head" frac flange. RU BJ & frac stage #1 (CP1 sds) W/ 40,327# 20/40 sand in 416 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 2756 psi. Treated @ ave press of 2186 psi W/ ave rate of 24.7 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #2. ISIP--2165 psi. Leave pressure on well. Est 559 BWTR.

## See day 2(b)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 143 Starting oil rec to date:   
 Fluid lost/recovered today: 416 Oil lost/recovered today:   
 Ending fluid to be recovered: 559 Cum oil recovered:   
 IFL:  FFL:  FTP:  Choke:  Final Fluid Rate:  Final oil cut:

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand fracCompany: BJ ServicesProcedure or Equipment detail: CP1 sands down 5 1/2" casing780 gals of 4% Techni-Hib 767W "pre-pad"467 gals of fresh water spacer & Cross-link3200 gals of pad2500 gals W/ 1-5 ppg of 20/40 sand5026 gals of 5-8 ppg of 20/40 sand500 gals of 15% HCL acidFlush W/ 5002 gals of slick water\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*Max TP: 2481 Max Rate: 24.8 BPM Total fluid pmpd: 416 bblsAvg TP: 2186 Avg Rate: 24.7 BPM Total Prop pmpd: 40,327#ISIP: 2165 5 min:  10 min:  FG: .83Completion Supervisor: Gary DietzBJ Services--CP1 \$22,542CD wtr & truck \$700NPC fuel gas \$110Weatherford service \$1,150NPC supervision \$75DAILY COST: \$24,577TOTAL WELL COST: \$368,135



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## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16Report Date: July 20, 2007Day: 2Operation: CompletionRig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: \_\_\_\_\_ Wt: \_\_\_\_\_ Grd: \_\_\_\_\_ Pkr/EOT @: \_\_\_\_\_ BP/Sand PBTD: 5230'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007SITP: \_\_\_\_\_ SICP: 1399

## Day 2(b):

RU Perforators WLT, crane & lubricater. Run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 5230'. Perf stage #2 (LODC sds) @ 5124-38' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #2 W/ 60,273# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 3621 psi (on third attempt of pressuring against perfs). Treated @ ave press of 2674 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #3. ISIP-2760 psi. Leave pressure on well. Est 1069 BWTR.

## See day 2(c)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 559 Starting oil rec to date: \_\_\_\_\_  
 Fluid lost/recovered today: 510 Oil lost/recovered today: \_\_\_\_\_  
 Ending fluid to be recovered: 1069 Cum oil recovered: \_\_\_\_\_  
 IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## STIMULATION DETAIL

Base Fluid used: Lightning 17 Job Type: Sand fracCompany: BJ ServicesProcedure or Equipment detail: LODC sands down 5 1/2" casing780 gals of 4% Techni-Hib 767W "pre-pad"597 gals of fresh water spacer & Cross-link4600 gals of pad3000 gals W/ 1-5 ppg of 20/40 sand6000 gals of 5-8 ppg of 20/40 sand1349 gals W/ 8 ppg of 20/40 sand500 gals of 15% HCL acidFlush W/ 4582 gals of slick water\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*Max TP: 3220 Max Rate: 24.9 BPM Total fluid pmpd: 510 bblsAvg TP: 2674 Avg Rate: 24.8 BPM Total Prop pmpd: 60,273#ISIP: 2760 5 min: \_\_\_\_\_ 10 min: \_\_\_\_\_ FG: .97Completion Supervisor: Gary Dietz

## COSTS

BJ Services--LODC	\$13,010
CD wtr & truck	\$1,000
NPC fuel gas	\$150
Weatherford frac plug	\$2,400
Perforators LLC-LODC	\$4,165
NPC supervision	\$75

DAILY COST: \$20,800TOTAL WELL COST: \$388,935



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## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: Wt: Grd: Pkr/EOT @: BP/Sand PBTD: 5230', 4900'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 2003

## Day 2(c):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 15' X 3/18" slick perf gun. Set plug @ 4900'. Perf stage #3 (C sds) @ 4780-95' W/ 4 JSPF. All 1 run. RU BJ Services & frac stage #3 W/ 60,060# 20/40 sand in 510 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Perfs broke down @ 4170 psi (on sixth attempt of pressuring against perfs). Treated @ ave press of 1833 psi W ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #4. ISIP--1800 psi. Leave pressure on well. Est 1579 BWTR.

See day 2(d)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 1069 Starting oil rec to date:  
 Fluid lost/recovered today: 510 Oil lost/recovered today:  
 Ending fluid to be recovered: 1579 Cum oil recovered:  
 IFL: FFL: FTP: Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: C sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

509 gals of fresh water spacer &amp; Cross-link

4600 gals of pad

3000 gals W/ 1-5 ppg of 20/40 sand

6000 gals of 5-8 ppg of 20/40 sand

1756 gals W/ 8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 4288 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 2285 Max Rate: 24.9 BPM Total fluid pmpd: 510 bbls

Avg TP: 1833 Avg Rate: 24.8 BPM Total Prop pmpd: 60,060#

ISIP: 1800 5 min: 10 min: FG: .81

Completion Supervisor: Gary Dietz

BJ Services--C \$13,010

CD wtr &amp; truck \$1,000

NPC fuel gas \$150

Weatherford frac plug \$2,400

Perforators LLC--C \$3,830

NPC supervision \$75

DAILY COST: \$20,465

TOTAL WELL COST: \$409,400



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: \_\_\_\_\_ Wt: \_\_\_\_\_

Grd: \_\_\_\_\_ Pkr/EOT @: \_\_\_\_\_

BP/Sand PBTD: 5230', 4900'

BP/Sand PBTD: 4740'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: \_\_\_\_\_ SICP: 1420

## Day 2(d):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 14' X 3/18" slick perf gun. Set plug @ 4740'. Perf stage #4 (D: sds) @ 4680-94' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #4. Unable to breakdown perfs after several attempts W/ 4200 psi max. RL WLT & RIH W/ 3 1/2" dumpbailer W/ 8 gals 15% HCL acid. Tag sd @ 4661'. Dump acid & LD bailer. Flow well back on chokes for 2 1/2 hrs, rec es 150 BTF. Recovered acid & strung out sand. Flowing fairly clean @ end. Casing pressure @ 150 psi. RU BJ & breakdown D2 perfs @ 1889 psi. Frac stage #4 W/ 79,938# 20/40 sand in 623 bbls Lightning frac 17 fluid. Pumped 780 gals 4% Techni-Hib 767W "pre-pad" & fresh wtr spacer ahead of frac. Treated @ ave press of 1860 psi W/ ave rate of 24.8 BPM. Spotted 500 gals 15% HCL acid in flush to cover stage #5. ISIP--1960 psi. Leave pressure on well. Est 2052 BWTR.

See day 2(e)

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 1579

Starting oil rec to date: \_\_\_\_\_

Fluid lost/recovered today: 473

Oil lost/recovered today: \_\_\_\_\_

Ending fluid to be recovered: 2052

Cum oil recovered: \_\_\_\_\_

IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## STIMULATION DETAIL

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail: D2 sands down 5 1/2" casing

780 gals of 4% Techni-Hib 767W "pre-pad"

341 gals of fresh water spacer &amp; Cross-link

6000 gals of pad

4000 gals W/ 1-5 ppg of 20/40 sand

8000 gals of 5-8 ppg of 20/40 sand

2397 gals W/ 8 ppg of 20/40 sand

500 gals of 15% HCL acid

Flush W/ 4120 gals of slick water

\*\*Flush called @ blender--includes 2 bbls pump/line volume\*\*

Max TP: 2399 Max Rate: 24.9 BPM Total fluid pmpd: 623 bbls

Avg TP: 1860 Avg Rate: 24.8 BPM Total Prop pmpd: 79,938#

ISIP: 1960 5 min: \_\_\_\_\_ 10 min: \_\_\_\_\_ FG: .85

Completion Supervisor: Gary Dietz

## COSTS

BJ Services--D2 \$16,739

CD wtr &amp; truck \$1,400

NPC fuel gas \$225

Weatherford frac plug \$2,400

Perforators LLC--D2 \$4,390

NPC supervision \$75

DAILY COST: \$25,229

TOTAL WELL COST: \$434,629



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 20, 2007

Day: 2

Operation: Completion

Rig: Rigless

## WELL STATUS

Surf Csg: 8 5/8' @ 324'

Prod Csg: 5 1/2" @ 6029'

Csg PBTD: 5929' WL

Tbg: Size: Wt:

Grd: Pkr/EOT @:

BP/Sand PBTD: 5230', 4900'

BP/Sand PBTD: 4740', 4250'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 19, 2007

SITP: SICP: 1740

Day 2(e):

RU Perforators WLT & run Weatherford 5 1/2" composite flow-through frac plug & 7' X 3/18" slick perf gun. Set plug @ 4250'. Perf stage #5 (GB6 sds) @ 4160-67' W/ 4 JSPF. All 1 run. RU BJ Services to frac stage #5. Pressure against perfs to 4200 psi--holding solid.

\*\*BJ Blender will not run !!\*\*

Shut well in with pressure overnight. Est 2052 BWTR.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2052

Starting oil rec to date:

Fluid lost/recovered today:

Oil lost/recovered today:

Ending fluid to be recovered:

Cum oil recovered:

IFL: FFL: FTP:

Choke: Final Fluid Rate: Final oil cut:

## STIMULATION DETAIL

## COSTS

Base Fluid used: Job Type:

Weatherford frac plug \$2,400

Company:

Perforators LLC--GB6 \$2,870

Procedure or Equipment detail:

NPC supervision \$75

Max TP: Max Rate: Total fluid pmpd:

Avg TP: Avg Rate: Total Prop pmpd:

ISIP: 5 min: 10 min: FG:

Completion Supervisor: Gary Dietz

DAILY COST: \$5,345

TOTAL WELL COST: \$439,974



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## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 21, 2007

Day: 3

Operation: Completion

Rig: NC #1

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5929' WL  
 Tbg: Size: 2 7/8" Wt: 6.5# Grd: J-55 Pkr/EOT @: 4313' BP/Sand PBTD: 5230', 4900'  
 BP/Sand PBTD: 4740'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 20, 2007

SITP: SICP: 2250

2250 psi on well. RU BJ Services & breakdown stage #5 (GB6 sds) @ 4201 psi. Frac stage #5 W/ 28,569# 20/40 sand in 317 bbls Lightning frac 17 fluid. Treated @ ave press of 1594 psi W/ ave rate of 24.9 BPM. ISIP--1545 psi. RD BJ & WLT. Begin immediate flowback of frac on 12/64 choke @ 1 BPM. Zone flowed 2.5 hrs rec add'l 135 BTF (est 12% of combined frac load of 2376 bbls--includes 150 bbls f/ previous FB). MIRU NC #1. ND Cameron BOP & 5M frac head. Install 3M production tbg head & NL Weatherford Schaeffer BOP. Talley, PU & TIH W/ new Weatherford 4 3/4" "Chomp" bit, bit sub & new 2 7/8 8rd 6.5# J-55 tbg. Tag fill @ 4181'. Tbg displaced 10 BW on TIH. RU power swivel. C/O sd to composite plug @ 4250'. Drill out plug in 25 minutes. Circ hole clean W/ no fluid loss. Hang back swivel. SIFN W/ EOT @ 4313'. Est 2224 BWTR.

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2052 Starting oil rec to date: \_\_\_\_\_  
 Fluid lost/recovered today: 172 Oil lost/recovered today: \_\_\_\_\_  
 Ending fluid to be recovered: 2224 Cum oil recovered: \_\_\_\_\_  
 IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## STIMULATION DETAIL

## COSTS

Base Fluid used: Lightning 17 Job Type: Sand frac

Company: BJ Services

Procedure or Equipment detail:

780 gals of 4% Techni-Hib 767W "pre-pad"

682 gals of fresh water spacer &amp; Cross-link

2400 gals of pad

1875 gals W/ 1-5 ppg of 20/40 sand

3505 gals of 5-8 ppg of 20/40 sand

Flush W/ 4074 gals of slick water

Max TP: 1867 Max Rate: 25 BPM Total fluid pmpd: 317 bbls

Avg TP: 1594 Avg Rate: 24.9 BPM Total Prop pmpd: 28,569#

ISIP: 1545 5 min: 10 min: FG: .81

Completion Supervisor: Gary Dietz

NC #1 rig	\$5,452
Weatherford BOP	\$250
BJ Services - GB6	\$20,906
CD wtr & truck	\$520
NPC fuel gas	\$100
Marta-Co - FB fittings	\$300
B & L - new J55 tbg	\$32,771
Nabors swivel	\$750
CD wtr transfer	\$300
Unichem chemicals	\$300
Weatherford "chomp" bit	\$1,450
NPC sfc equipment	\$130,000
Mecham labor/welding	\$19,500
NPC supervision	\$300
DAILY COST:	\$212,899
TOTAL WELL COST:	\$652,873

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**Day: 4**

**Rig:** NC #1

**Sand 5957.82'**

**SPF/#shots**

**SITP:**                      **SICP:**

**TOTAL WELL COST:** \$667,693

**Day: 5**

Rig: NC #1

**Sand 5957.82'**

SPF/#shots

**SITP:**                      **SICP:**

**Final oil cut:**

---

**TOTAL WELL COST:** \$673,833



## DAILY COMPLETION REPORT

WELL NAME: Federal 1-20-9-16

Report Date: July 26, 2007

Day: 6

Operation: Completion

Rig: NC #1

## WELL STATUS

Surf Csg: 8 5/8' @ 324' Prod Csg: 5 1/2" @ 6029' Csg PBTD: 5957.82'  
 Tbg: Size: 2 7/8" Wt: 6.5# Grd: J-55 Pkr/EOT @: 5614.97' Sand 5957.82'

## PERFORATION RECORD

Zone	Perfs	SPF/#shots	Zone	Perfs	SPF/#shots
GB6 sds	4160-4167'	4/28			
D2 sds	4680-4694'	4/56			
C sds	4780-4795'	4/60			
LODC sds	5124-5138'	4/56			
CP1 sds	5526-5544'	4/72			

## CHRONOLOGICAL OPERATIONS

Date Work Performed: July 25, 2007

SITP: SICIP:

6:30 AM OWU, RIH 45-3/4X25' Slick Rods, 100-3/4X25' Guided Rods, 3/4X8'-6'-4'-2' Ponys, 1 1/2X26' Polish Rod, R/U Unit, R/L Rig Pump, Fill Tbg W/-1 Bbl Wtr, Stroke Unit & Tbg To 800 Psi, Good Test. R/D Eq, R/D Rig. POP @ 10:30AM, 120" SL, 5 SPM ( Final Report )

## FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 2257 Starting oil rec to date: \_\_\_\_\_  
 Fluid lost/recovered today: 1 Oil lost/recovered today: \_\_\_\_\_  
 Ending fluid to be recovered: 2258 Cum oil recovered: \_\_\_\_\_  
 IFL: \_\_\_\_\_ FFL: \_\_\_\_\_ FTP: \_\_\_\_\_ Choke: \_\_\_\_\_ Final Fluid Rate: \_\_\_\_\_ Final oil cut: \_\_\_\_\_

## TUBING DETAIL

KB = 12.0  
 179 Jts Tbg = 5506.29'  
 T/A = 2.80 @ 5518.29 KB  
 1 Jt Tbg = 30.52  
 S/N = 1.10 @ 5551.61' KB  
 2 Jts Tbg = 61.81'  
 N/C = .45 @ 5614.97 KB

## ROD DETAIL

1 1/2X26' Polish Rod  
 3/4X2'-4'-6'-8' Ponys  
 100-3/4X25' Guided Rods  
 95-3/4X25' Slick Rods  
 20-3/4X25' Guided Rods  
 6-1 1/2X25' Wt Bars  
 CDI-2 1/2X1 1/2X16X20'  
 RHAC.

## COSTS

NC #1 rig	\$2,493
NPC Supervision	\$300
ZHO	\$1,030
NPC Frac Tnks 7x8 Dys	\$2,240
NPC Swab Tnk 1x4 Dys	\$160
NPC Frac Head	\$500
B/Grade Rod String	\$10,004
CD Wtr Trucking	\$300

Completion Supervisor: Duane Freston.

DAILY COST: \$17,027

TOTAL WELL COST: \$690,860

## ATTACHMENT H

### WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1. Set CIBP @ 4110'
2. Plug #1 Set 100' plug on top of CIBP using 12 sx Class "G" cement
3. Plug #2 168' balance plug using 19 sx Class "G" cement 50' above Trona-Bird's Nest extending 50' below base of Mahogany Oil Shale
4. Plug #3 120' balance plug using 14sx Class "G" cement 60' above Uinta/Green River and extending 60' below
5. Plug #4 Pump 43 sx Class "G" cement down 5 ½" casing to 374'

The approximate cost to plug and abandon this well is \$42,000.

## FEDERAL 1-20-9-16

Spud Date: 05/16/07  
Put on Production: 07/25/07  
GL: 6038' KB: 6050'

### Proposed P & A Wellbore Diagram

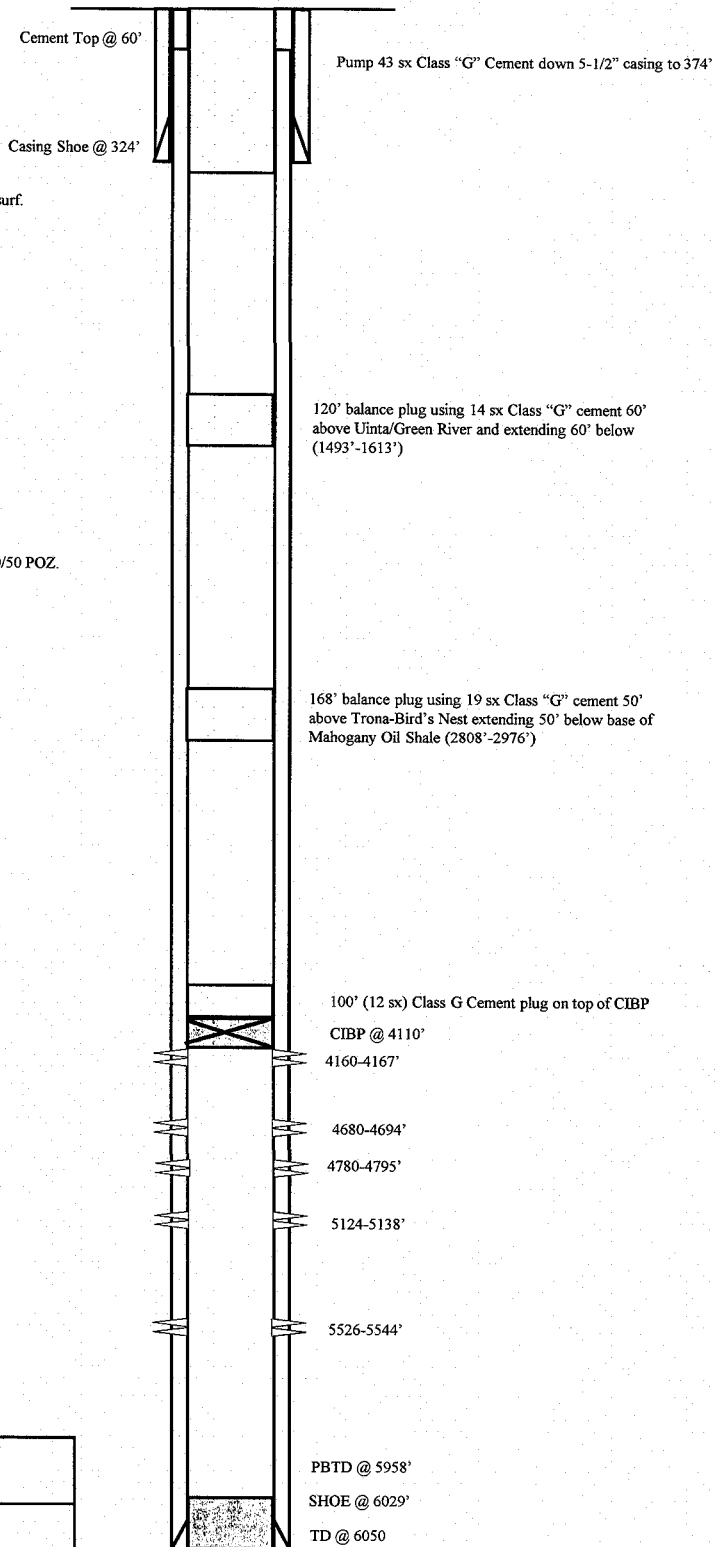
Initial Production: BOPD,  
MCFD, BWPD

#### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (312.36')  
DEPTH LANDED: 324.21' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

#### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 137 jts. (6015.83')  
DEPTH LANDED: 6029.08' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.  
CEMENT TOP: 60'



### NEWFIELD

### FEDERAL 1-20-9-16

617'FNL & 652' FEL  
NE/NE Section 20-T9S-R16E  
Duchesne Co, Utah  
API #43-013-33066; Lease # UTU-52018



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

August 15, 2012

Newfield Production Company  
1001 Seventeenth Street, Suite 2000  
Denver, CO 80202

Subject: Greater Monument Butte Unit Well: Federal 1-20-9-16, Section 20, Township 9 South, Range 16 East, SLBM, Duchesne County, Utah, API Well # 43-013-33066

Gentlemen:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Newfield Production Company.
3. A casing\tubing pressure test shall be conducted prior to commencing injection.
4. Pressure shall be monitored between the surface casing and the production casing on a regular basis. Any pressure changes observed shall be reported to the Division immediately.
5. The top of the injection interval shall be limited to a depth no higher than 3,939 feet in the Federal 1-20-9-16 well.

A final approval to commence injection will be issued upon satisfactory completion of the listed stipulations. If you have any questions regarding this approval or the necessary requirements, please contact Mark Reinbold at 801-538-5333 or Brad Hill at 801-538-5315.

Sincerely,

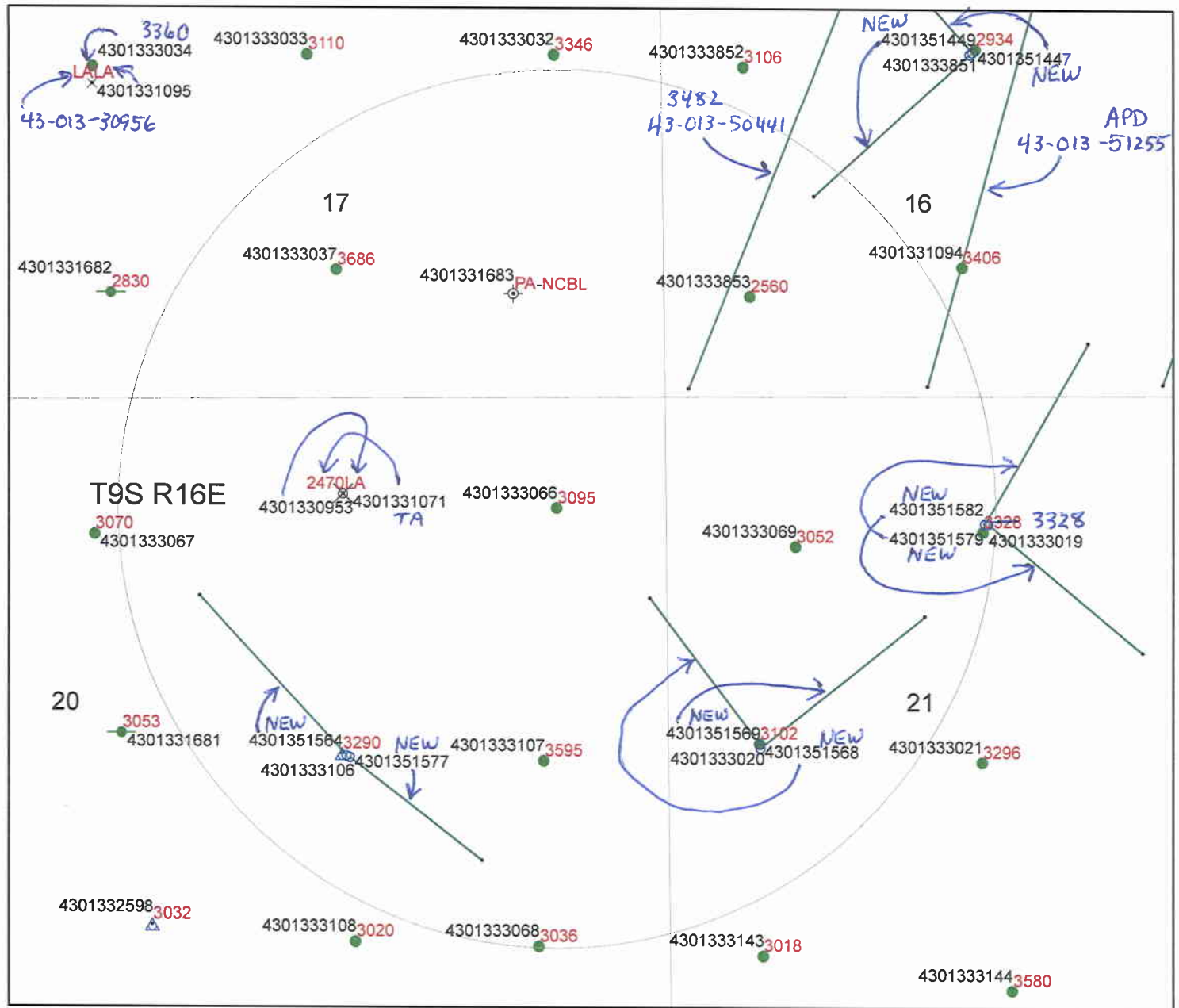
John Rogers  
Associate Director

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
SITLA  
Duchesne County  
Newfield Production Company, Myton  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC





## Legend

Buffer\_of\_SGID93\_ENERGY\_DNROilGasWells\_78

SGID93\_ENERGY.DNROilGasWells

**SGID93.ENERGY.DNROilGasWells**

**GIS\_STAT\_TYPE**

○ APD

⊙ DRL

⚡ GIW

○<sub>os</sub> GSW

× LA

○ LOC *NEW*

● OPS

⊙ PA

⊙ PGW

● POW

▲ RET

⊙ SGW

— SOW

⊗ TA

○ TW

⊙ WDW

▲ WIW

● WSW

⊙

⊙

⊙

⊙

⊙

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⊙

⊙

0 0.05 0.1 0.2 0.3 0.4 Miles



1870calc = approx cement top calculated from well completion report

**DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT  
STATEMENT OF BASIS**

**Applicant:** Newfield Production Company      **Well:** Federal 1-20-9-16

**Location:** 20/9S/16E      **API:** 43-013-33066

**Ownership Issues:** The proposed well is located on BLM land. The well is located in the Greater Monument Butte Unit. Lands in the one-half mile radius of the well are administered by the BLM and the State of Utah. The Federal Government and the State of Utah are the mineral owners within the area of review (AOR). Newfield and other various individuals hold the leases in the unit. Newfield has provided a list of all surface, mineral and lease holders in the half-mile radius. Newfield is the operator of the Greater Monument Butte Unit. Newfield has submitted an affidavit stating that all owners and interest owners have been notified of their intent.

**Well Integrity:** The proposed well has surface casing set at 324 feet and has a cement top at the surface. A 5½ inch production casing is set at 6,029 feet. A cement bond log demonstrates adequate bond in this well up to about 3,095 feet. A 2 7/8 inch tubing with a packer will be set at 4,110 feet. Higher perforations will be opened at a later date. A mechanical integrity test will be run on the well prior to injection. On the basis of surface locations, there are 8 producing wells, 1 injection well, 1 temporarily abandoned well, and 1 P/A well in the AOR. In addition, there is 1 horizontal producing well with a surface location outside the AOR and a bottom hole location inside the AOR. There is also an approved surface location outside the AOR from which a horizontal well will be drilled to a bottom hole location inside the AOR. Finally, there are two proposed locations for directional wells with surface locations inside the AOR and bottom hole locations outside and one proposed location for a directional well with a surface location outside the AOR and bottom hole location inside. All of the existing wells have evidence of adequate casing and cement for the proposed injection interval.

**Ground Water Protection:** As interpreted from the Utah Geological Survey's DOE Project-Uinta Basin Water Draft Map (Paul B. Anderson, December 2, 2011), the base of moderately saline water (3000-10,000 mg/l TDS) is at a depth of approximately 2700 feet. Injection shall be limited to the interval between 3,939 feet and 5,958 feet in the Green River Formation. Information submitted by Newfield indicates that the fracture gradient for the 1-20-9-16 well is 0.81 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 1,769 psig. The requested maximum pressure is 1,769 psig. The anticipated average injection pressure is 1100 psig. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Federal 1-20-9-16**  
**page 2**

**Oil/Gas& Other Mineral Resources Protection:** The Board of Oil, Gas & Mining approved the Greater Monument Butte Unit on December 1, 2009. Correlative rights issues were addressed at this time. Previous reviews in this area indicate that other mineral resources in the area have been protected or are not at issue.

**Bonding:** Bonded with the BLM

**Actions Taken and Further Approvals Needed:** A notice of agency action has been sent to the Salt Lake Tribune and the Uinta Basin Standard. A casing/tubing pressure test will be required prior to injection. It is recommended that approval of this application be granted.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Mark Reinbold

Date 8/10/2012

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-392

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 12, 13, 15, 17, 19, 20, 21, 22, 23, 24, AND 25, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17<sup>th</sup> Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

Greater Monument Butte Unit:

Monument Federal 22-12J well located in SE/4 NW/4, Section 12, Township 9 South, Range 16 East  
API 43-013-15796  
Federal 5-13-9-16 well located in SW/4 NW/4, Section 13, Township 9 South, Range 16 East  
API 43-013-32658  
Federal 13-15-9-16 well located in SW/4 SW/4, Section 15, Township 9 South, Range 16 East  
API 43-013-33136  
Federal 7-17-9-16 well located in SW/4 NE/4, Section 17, Township 9 South, Range 16 East  
API 43-013-33030  
Federal 1-19-9-16 well located in NE/4 NE/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33062  
Federal 5-19-9-16 well located in SW/4 NW/4, Section 19, Township 9 South, Range 16 East  
API 43-013-33174  
Federal 1-20-9-16 well located in NE/4 NE/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33066  
Federal 3-20-9-16 well located in NE/4 NW/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33067  
Federal 5-20-9-16 well located in SW/4 NW/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33104  
Federal 9-20-9-16 well located in NE/4 SE/4, Section 20, Township 9 South, Range 16 East  
API 43-013-33068  
Federal 9-21-9-16 well located in NE/4 SE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-33145  
Monument Federal 31-21-9-16Y well located in NW/4 NE/4, Section 21, Township 9 South, Range 16 East  
API 43-013-31726  
Federal 1-22-9-16 well located in NE/4 NE/4, Section 22, Township 9 South, Range 16 East  
API 43-013-32612  
Federal 7-22-9-16 well located in SW/4 NE/4, Section 22, Township 9 South, Range 16 East  
API 43-013-33027  
Federal 3-23-9-16 well located in NE/4 NW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33176

Federal 11-23-9-16 well located in NE/4 SW/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33178

Federal 15-23-9-16 well located in SW/4 SE/4, Section 23, Township 9 South, Range 16 East  
API 43-013-33182

Federal 3-24-9-16 well located in NE/4 NW/4, Section 24, Township 9 South, Range 16 East  
API 43-013-33084

Federal 15-24-9-16 well located in SW/4 SE/4, Section 24, Township 9 South, Range 16 East  
API 43-013-33344

Federal 21-25Y well located in NE/4 NW/4, Section 25, Township 9 South, Range 16 East  
API 43-013-31394

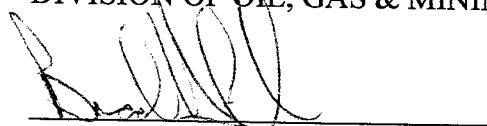
The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 22<sup>nd</sup> day of May, 2012.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING



Brad Hill  
Permitting Manager

**Newfield Production Company**

**MONUMENT FEDERAL 22-12J, FEDERAL 5-13-9-16, FEDERAL 13-15-9-16, FEDERAL 7-17-9-16, FEDERAL 1-19-9-16, FEDERAL 5-19-9-16, FEDERAL 1-20-9-16, FEDERAL 3-20-9-16, FEDERAL 5-20-9-16, FEDERAL 9-20-9-16, FEDERAL 9-21-9-16, MONUMENT FEDERAL 31-21-9-16Y, FEDERAL 1-22-9-16, FEDERAL 7-22-9-16, FEDERAL 3-23-9-16, FEDERAL 11-23-9-16, FEDERAL 15-23-9-16, FEDERAL 3-24-9-16, FEDERAL 15-24-9-16, FEDERAL 21-25Y**

**Cause No. UIC-392**

Publication Notices were sent to the following:

Newfield Production Company  
1001 17th Street, Suite 2000  
Denver, CO 80202

Uintah Basin Standard  
268 S 200 E  
Roosevelt, UT 84066  
via e-mail [ubs@ubstandard.com](mailto:ubs@ubstandard.com)

Salt Lake Tribune  
P O Box 45838  
Salt Lake City, UT 84145  
via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Vernal Office  
Bureau of Land Management  
170 S 500 E  
Vernal, UT 84078

SITLA  
675 E 500 S Ste 500  
Salt Lake City, UT 84102-2818

Duchesne County Planning  
P O Box 317  
Duchesne, UT 84021-0317

Bruce Suchomel  
US EPA Region 8  
MS 8P-W-GW  
1595 Wynkoop Street  
Denver, CO 80202-1129

Newfield Production Company  
Rt 3 Box 3630  
Myton, UT 84052

  
\_\_\_\_\_



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

May 22, 2012

Via e-mail [legals@ubstandard.com](mailto:legals@ubstandard.com)

Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure



**Jean Sweet - Re: Notice of Agency Action – Newfield Production Company Cause No. UIC-392**

---

**From:** Cindy Kleinfelter <classifieds@ubstandard.com>  
**To:** Jean Sweet <jsweet@utah.gov>  
**Date:** 5/23/2012 3:07 PM  
**Subject:** Re: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

---

On 5/22/2012 2:09 PM, Jean Sweet wrote:

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet, Executive Secretary  
Utah Div. of Oil, Gas & Mining  
1594 West Temple, Suite 1210  
Salt Lake City, UT  
801-538-5329  
[jsweet@utah.gov](mailto:jsweet@utah.gov)

It will be in the May 29 edition.  
Thank you.  
Cindy



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

May 22, 2012

Via e-mail [naclegal@mediaoneutah.com](mailto:naclegal@mediaoneutah.com)

Salt Lake Tribune  
P. O. Box 45838  
Salt Lake City, UT 84145

Subject: Notice of Agency Action – Newfield Production Company Cause No. UIC-392

To Whom It May Concern:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please notify me via e-mail of the date it will be published. My e-mail address is: [jsweet@utah.gov](mailto:jsweet@utah.gov).

Please send proof of publication and billing for **account #9001402352** to:

Division of Oil, Gas and Mining  
PO Box 145801  
Salt Lake City, UT 84114-5801

Sincerely,

Jean Sweet  
Executive Secretary

Enclosure

**From:** "Fultz, Mark" <naclegal@mediaoneutah.com>  
**To:** <jsweet@utah.gov>  
**Date:** 5/22/2012 2:32 PM  
**Subject:** Proof for Notice of Agency Action  
**Attachments:** OrderConf.pdf

AD# 794885  
Run SL Trib 5/25/12  
Cost \$331.25  
Please advise of any changes  
Thank You  
Ken

## Order Confirmation for Ad #0000794885-01

<b>Client</b>	DIV OF OIL-GAS & MINING	<b>Payor Customer</b>	DIV OF OIL-GAS & MINING
<b>Client Phone</b>	801-538-5340	<b>Payor Phone</b>	801-538-5340
<b>Account#</b>	[REDACTED]	<b>Payor Account</b>	[REDACTED]
<b>Address</b>	1594 W NORTH TEMP #1210, P.O. BOX 145801 SALT LAKE CITY, UT 84114 USA	<b>Payor Address</b>	1594 W NORTH TEMP #1210, P.O. BOX SALT LAKE CITY, UT 84114
<b>Fax</b>	801-359-3940	<b>Ordered By</b>	<b>Acct. Exec</b>
<b>Email</b>	earlenerussell@utah.gov	Jean	kstowe

<b>Total Amount</b>	<b>\$331.25</b>			
<b>Payment Amt</b>	<b>\$0.00</b>			
<b>Amount Due</b>	<b>\$331.25</b>	<b>Tear Sheets</b>	<b>Proofs</b>	<b>Affidavits</b>
		0	0	1
<b>Payment Method</b>		<b>PO Number</b>	Newfield Prod UIC-392	
<b>Confirmation Notes:</b>				
<b>Text:</b>	Jean			

<b>Ad Type</b>	<b>Ad Size</b>	<b>Color</b>
Legal Liner	3.0 X 87 Li	<NONE>

<b>Product</b>	<b>Placement</b>	<b>Position</b>
Salt Lake Tribune::	Legal Liner Notice - 0998	Public Meeting/Hear-ing Notices
<b>Scheduled Date(s):</b>	05/25/2012	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
sltrib.com::	Legal Liner Notice - 0998	Public Meeting/Hear-ing Notices
<b>Scheduled Date(s):</b>	05/25/2012	
<b>Product</b>	<b>Placement</b>	<b>Position</b>
utahlegals.com::	utahlegals.com	utahlegals.com
<b>Scheduled Date(s):</b>	05/25/2012	

## Order Confirmation for Ad #0000794885-01

Ad Content Proof Actual Size

# Order Confirmation for Ad #0000794885-01

Ad Content Proof 135%

BEFORE THE DIVISION OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC-392

IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 12, 13, 15, 17, 19, 20, 21, 22, 23, 24, AND 25, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESNE COUNTY, UTAH, AS CLASS II INJECTION WELLS.

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER. Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17th Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells:

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API 43-013-15796

Federal 5-13-9-16 well located in SW/4 NW/4, Section 13, Township 9 South, Range 16 East

API 43-013-32658

Federal 13-15-9-16 well located in SW/4 SW/4, Section 15, Township 9 South, Range 16 East

API 43-013-33136

Federal 7-17-9-16 well located in SW/4 NE/4, Section 17, Township 9 South, Range 16 East

API 43-013-33030

Federal 1-19-9-16 well located in NE/4 NE/4, Section 19, Township 9 South, Range 16 East

API 43-013-33062

Federal 5-19-9-16 well located in SW/4 NW/4, Section 19, Township 9 South, Range 16 East

API 43-013-33174

Federal 1-20-9-16 well located in NE/4 NE/4, Section 20, Township 9 South, Range 16 East

API 43-013-33066

Federal 3-20-9-16 well located in NE/4 NW/4, Section 20, Township 9 South, Range 16 East

API 43-013-33067

Federal 5-20-9-16 well located in SW/4 NW/4, Section 20, Township 9 South, Range 16 East

API 43-013-33104

Federal 9-20-9-16 well located in NE/4 SE/4, Section 20, Township 9 South, Range 16 East

API 43-013-33068

Federal 9-21-9-16 well located in NE/4 SE/4, Section 21, Township 9 South, Range 16 East

API 43-013-33145

Monument Federal 31-21-9-16Y well located in NW/4 NE/4, Section 21, Township 9 South, Range 16 East

API 43-013-31726

Federal 1-22-9-16 well located in NE/4 NE/4, Section 22, Township 9 South, Range 16 East

API 43-013-32612

Federal 7-22-9-16 well located in SW/4 NE/4, Section 22, Township 9 South, Range 16 East

API 43-013-33027

Federal 3-23-9-16 well located in NE/4 NW/4, Section 23, Township 9 South, Range 16 East

API 43-013-33176

Federal 11-23-9-16 well located in NE/4 SW/4, Section 23, Township 9 South, Range 16 East

API 43-013-33178

Federal 15-23-9-16 well located in SW/4 SE/4, Section 23, Township 9 South, Range 16 East

API 43-013-33182

Federal 3-24-9-16 well located in NE/4 NW/4, Section 24, Township 9 South, Range 16 East

API 43-013-33084

Federal 15-24-9-16 well located in SW/4 SE/4, Section 24, Township 9 South, Range 16 East

API 43-013-33344

Federal 21-25Y well located in NE/4 NW/4, Section 25, Township 9 South, Range 16 East

API 43-013-31394

The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selected zones in the Greer River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rules.

Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 22nd day of May, 2012.

STATE OF UTAH

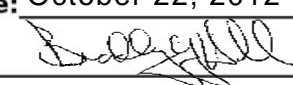
DIVISION OF OIL, GAS & MINING

/s/Brad Hill

Permitting Manager

794885

UPAXLP

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/12/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TUBING	
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>		
The subject well has been converted from a producing oil well to an injection well on 10/09/2012. On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test.		
<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> October 22, 2012 <b>By:</b> 		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/19/2012	

# Mechanical Integrity Test Casing or Annulus Pressure Test

Newfield Production Company

Rt. 3 Box 3630  
Myton, UT 84052  
435-646-3721

Witness: \_\_\_\_\_ Date 10/12/16 Time 11:30 am pm  
Test Conducted by: Riley Bugh  
Others Present: \_\_\_\_\_

Well: Federal 1-20-9-16Field: Monument B-H

Well Location:

Federal 1-20-9-16API No: 4301333066

<u>Time</u>	<u>Casing Pressure</u>	
0 min	<u>1575</u>	psig
5	<u>1575</u>	psig
10	<u>1575</u>	psig
15	<u>1575</u>	psig
20	<u>1575</u>	psig
25	<u>1575</u>	psig
30 min	<u>1575</u>	psig
35	_____	psig
40	_____	psig
45	_____	psig
50	_____	psig
55	_____	psig
60 min	_____	psig

Tubing pressure: 150 psig

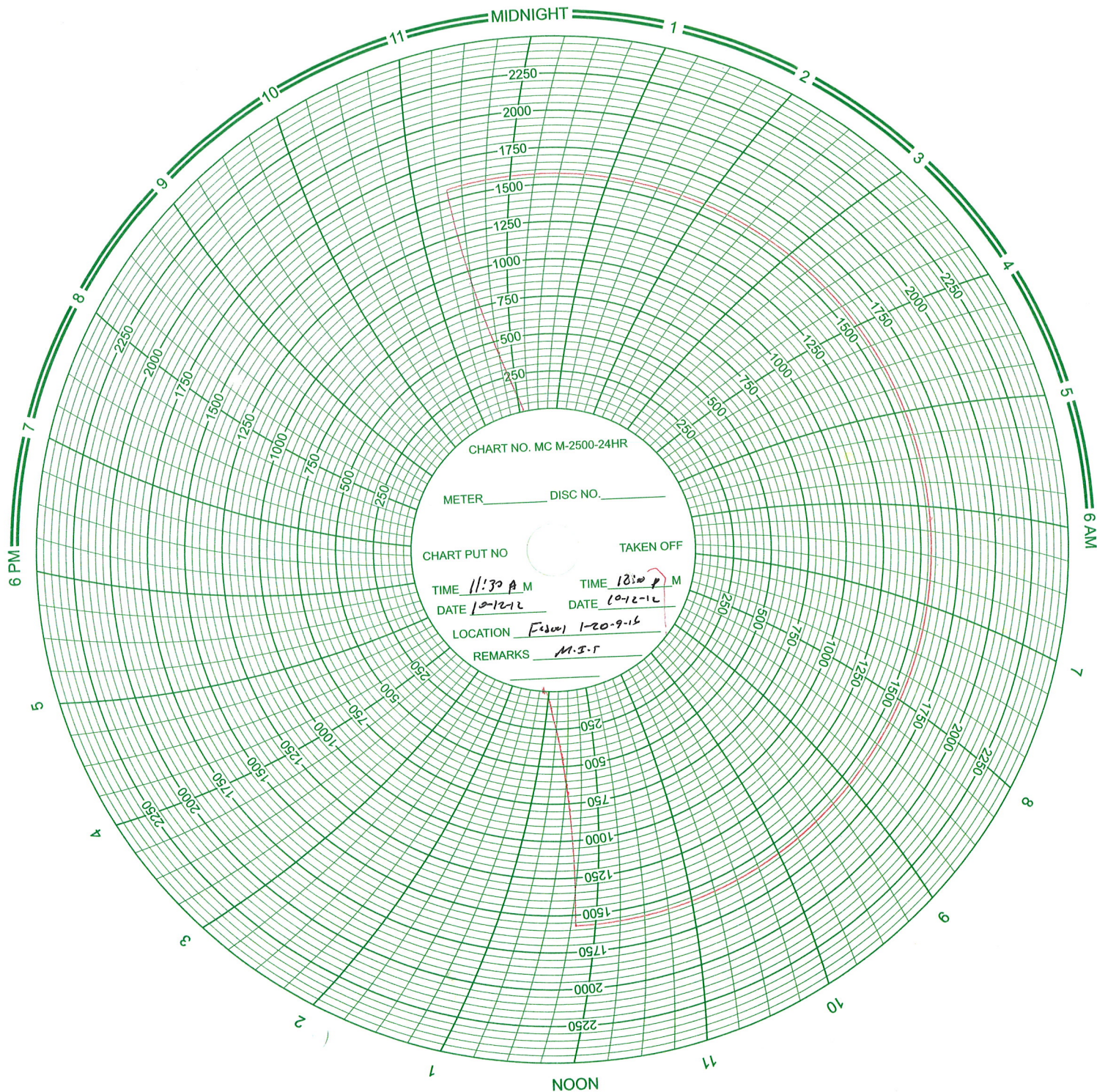
Result:

Pass

Fail

Signature of Witness: \_\_\_\_\_

Signature of Person Conducting Test: \_\_\_\_\_



**Daily Activity Report****Format For Sundry****FEDERAL 1-20-9-16****8/1/2012 To 12/30/2012****10/4/2012 Day: 1****Conversion**

Nabors #1608 on 10/4/2012 - MIRUSU. LD rods. Pressure test tbg. - RU pumping unit. Unseat rod pump. Flush tbg w/ 40 BW @ 250°. - Soft seat rods & fill tbg w/ 12 BW. Pressure tbg to 3000 psi. Pressure was dropping off slow. Pressure tbg to 5000 psi attempting to open hole bigger w/o success. - LD 215- 3/4" rods, ponies & polished rod on trailer. Flush tbg & rods w/ additional 20 BW during TOH. - X-over for tbg equipment. Tie drill line back single line. ND wellhead. TA was not set. NU BOPs. RU rig floor. - Flush tbg w/ 30 BW. Drop standing valve down tbg. Fill tbg & pressure test tbg to 3000 psi (good test). - RU sandline. RIH w/ fishing tool on sandline & retrieve. - MIRUSU. Hot oiler had pumped 60 bbls water down csg @ 250°.

**Daily Cost:** \$0**Cumulative Cost:** \$8,328

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**10/5/2012 Day: 2****Conversion**

Nabors #1608 on 10/5/2012 - TOH w/ tbg (talleying, breaking collars & applying Liquid-Oring to threads). LD 48- jts tbg on trailer. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'. - On standby waiting for possible frac schedule change. - On standby waiting for possible frac schedule change. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - SWIFN. RU pump & pump lines. - SWIFN. RU pump & pump lines. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perforators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perforators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - Tools won't test. Move pkr. Still won't test. - Tools won't test. Move pkr. Still won't test. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'.

**Daily Cost:** \$0**Cumulative Cost:** \$16,122

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**10/8/2012 Day: 4****Conversion**

Nabors #1608 on 10/8/2012 - Frac D-1 Sands, FB, CO top of RBP and retrieve RBP. POOH. RBIH w/injection string. - Waith for acid truck from Multi-chem. - SWIFN. - Spot in pipe trailer and start LD pipe. LD 95 jts of 2 7/8" N-80 tbg. - Had to wair on semi trailer to LD pipe. Well still flowing after releasing the plug. - Release pkr, RD frac valve, RIH to latch on to RBP. Had to CO 15' of fill. Circ clean and released plug. - Open tbg up to FB on a 20 choke. Died down

to 0 after 20 bbls. - Filled backside w/12 bbls and PU to 500 psi. Frac D-1 sands 4636-39'. RD frac crew, called runners for the tbg trailer. - Spot in frac crew and RU lines. Set pkr @ 4614'. - Safety Meeting, discussed location hazards, recent NFX incidents, job procedure, emergency plans, meeting point. - Move plug down to 4670' and plug up to 4662'. Pressure test plug to 4000 PSI. Good test. - RU Muti-chem and pump 2 Bbls acid. Pump 24 Bbls behind HCL to spot @ 4640'. Move PKR above perms to 4608' and start breaking dwn zones. BD @ 3700 psi. Increased rate to .5 Bbl and pumped 5 bbls @ 1500 psi. shut down and pressurebled down to zero in less then a minute. - Waiting on frac crew.

**Daily Cost:** \$0

**Cumulative Cost:** \$84,384

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**10/9/2012 Day: 5**

**Conversion**

Nabors #1608 on 10/9/2012 - TIH w/ pkr. Test tbg. Set pkr. Test casing. RDMOSU. Well ready for MIT. - Held safety meeting & discussed JSA's. TIH w/ XN nipple, 2-3/8" x 4' pup jt, XO sub (2-7/8" to 2-3/8"), "HD" pkr, On/Off tool, PSN, 133 jts 2-7/8" tbg. - Tighten well head bolts. Test casing to 1400 psi. Took 2 attempts. - Pump 20 bbls fluid. Drop STD vlve. Fill tbg w/ 12 bbls. Test tbg to 3000 psi for 30 min, took 3 attempts. - RDMOSU. Well ready for MIT. - Pump 50 bbls pkr fluid. Set pkr w/ 15,000#'s tension @ 4107' CEO. 4117' EOT. - Single line rig. RD BOP's. Hang tbg in well on 6' pup joint. - RU sand line & fish std valve.

**Daily Cost:** \$0

**Cumulative Cost:** \$113,603

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**10/16/2012 Day: 6**

**Conversion**

Rigless on 10/16/2012 - Conduct initial MIT - On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test. **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$190,137

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**Pertinent Files: [Go to File List](#)**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/13/2012	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	
<input type="checkbox"/> DRILLING REPORT Report Date:	OTHER: <input type="text" value="Put on Injection"/>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> <div style="text-align: center;">         The above reference well was put on injection at 2:30 PM on          11/13/2012.       </div> <div style="text-align: right; margin-top: 20px;"> <b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          November 19, 2012</b> </div>		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/15/2012	

# FEDERAL 1-20-9-16

Spud Date: 05/16/07

Put on Production: 07/25/07

GL: 6038' KB: 6050'

## Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts. (312.36')

DEPTH LANDED: 324.21' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 137 jts. (6015.83')

DEPTH LANDED: 6029.08' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 325 sxs Prem. Lite II mixed & 425 sxs 50/50 POZ.

CEMENT TOP: 60'

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 133 jts (4089.7')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 41013.7' KB

ON/OFF TOOL AT: 4102.8'

ARROW #1 PACKER CE AT: 4107.75'

XO 2-3/8 x 2-7/8 J-55 AT: 4111.6'

TBG PUP 2-3/8 J-55 AT: 4112.1'

X/N NIPPLE AT: 4116.5'

TOTAL STRING LENGTH: EOT @ 4118'

### FRAC JOB

07/19/07 5526-5544'

#### **Frac CP1 sands as follows:**

40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal. Actual flush: 5002 gal.

07/19/07 5124-5138'

#### **Frac LODC sands as follows:**

60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal. Actual flush: 4582 gal.

07/19/07 4780-4795'

#### **Frac C sands as follows:**

60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal. Actual flush: 4288 gal.

07/19/07 4680-4694'

#### **Frac D2 sands as follows:**

79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal. Actual flush: 4120 gal.

07/20/07 4160-4167'

#### **Frac GB6 sands as follows:**

25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal. Actual flush: 4914 gal.

1/26/09

**Pump Change.** Updated r & t details.

10/08/12 4636-4639'

#### **Frac D1 sands as follows:**

12260# 20/40 sand in 178 bbls Lightning 17 frac fluid.

10/09/12

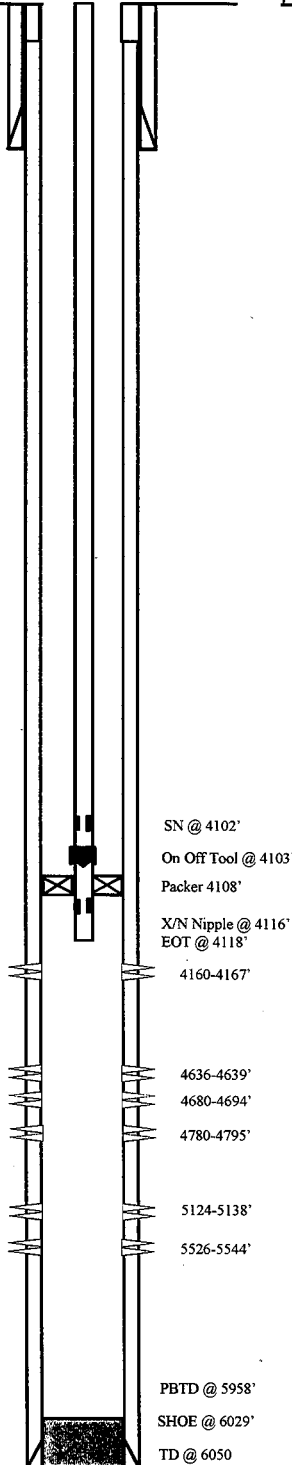
#### **Convert to Injection Well**

10/12/12

**Conversion MIT Finalized** - update tbg detail

### PERFORATION RECORD

07/10/07	5526-5544'	4 JSPF	72 holes
07/19/07	5124-5138'	4 JSPF	56holes
07/19/07	4780-4795'	4 JSPF	60 holes
07/19/07	4680-4694'	4 JSPF	56 holes
07/19/07	4160-4167'	4 JSPF	28 holes
10/05/12	4636-4639'	3 JSPF	9 holes



**NEWFIELD**

**FEDERAL 1-20-9-16**

617'FNL & 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

LCN 10/18/12



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## UNDERGROUND INJECTION CONTROL PERMIT


Cause No. UIC-392

**Operator:** Newfield Production Company  
**Well:** Federal 1-20-9-16  
**Location:** Section 20, Township 9 South, Range 16 East  
**County:** Duchesne  
**API No.:** 43-013-33066  
**Well Type:** Enhanced Recovery (waterflood)

### Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on August 15, 2012.
2. Maximum Allowable Injection Pressure: 1,769 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (3,939' – 5,958')
5. Any subsequent wells drilled within a ½ mile radius of this well shall have production casing cement brought up to or above the top of the unitized interval for the Greater Monument Butte Unit.

Approved by:

  
John Rogers  
Associate Director

11-7-2012  
Date

JR/MLR/js

cc: Bruce Suchomel, Environmental Protection Agency  
Bureau of Land Management, Vernal  
SITLA  
Eric Sundberg, Newfield Production Company, Denver  
Newfield Production Company, Myton  
Duchesne County  
Well File

N:\O&G Reviewed Docs\ChronFile\UIC\Newfield



1770 S. 5600 W.  
P.O. BOX 704005  
WEST VALLEY CITY, UTAH 84170  
FED. TAX I.D.# 87-0217663

The Salt Lake Tribune

MEDIAONE

Deseret News

PROOF OF PUBLICATION

CUSTOMER'S COPY

CUSTOMER NAME AND ADDRESS		ACCOUNT NUMBER	DATE
DIV OF OIL-GAS & MINING, 1594 W NORTH TEMP #1210 P.O. BOX 145801 SALT LAKE CITY, UT 84114		9001402352	5/25/2012
ACCOUNT NAME		BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH NOTICE OF AGENCY ACTION CAUSE NO. UIC-392	
DIV OF OIL-GAS & MINING,		IN THE MATTER OF THE APPLICATION OF NEWFIELD PRODUCTION COMPANY FOR ADMINISTRATIVE APPROVAL OF CERTAIN WELLS LOCATED IN SECTIONS 12, 13, 15, 17, 19, 20, 21, 22, 23, 24, AND 25, TOWNSHIP 9 SOUTH, RANGE 16 EAST, DUCHESE COUNTY, UTAH, AS CLASS II INJECTION WELLS.	
TELEPHONE	ADORDER#	THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER. Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Newfield Production Company, 1001 17th Street, Suite 2000, Denver, Colorado 80202, telephone 303-893-0102, for administrative approval of the following wells located in Duchesne County, Utah, for conversion to Class II injection wells: Greater Monument Butte Unit: Monument Federal 22-121 well located in SE/4 NW/4, Section 12, Township 9 South, Range 16 East API 43-013-15796 Federal 5-13-9-16 well located in SW/4 NW/4, Section 13, Township 9 South, Range 16 East API 43-013-32658 Federal 13-15-9-16 well located in SW/4 SW/4, Section 15, Township 9 South, Range 16 East API 43-013-33136 Federal 7-17-9-16 well located in SW/4 NE/4, Section 17, Township 9 South, Range 16 East API 43-013-33030 Federal 1-19-9-16 well located in NE/4 NE/4, Section 19, Township 9 South, Range 16 East API 43-013-33062 Federal 5-19-9-16 well located in SW/4 NW/4, Section 19, Township 9 South, Range 16 East API 43-013-33174 Federal 1-20-9-16 well located in NE/4 NE/4, Section 20, Township 9 South, Range 16 East API 43-013-33066 Federal 3-20-9-16 well located in NE/4 NW/4, Section 20, Township 9 South, Range 16 East API 43-013-33067 Federal 5-20-9-16 well located in SW/4 NW/4, Section 20, Township 9 South, Range 16 East API 43-013-33104 Federal 9-20-9-16 well located in NE/4 SE/4, Section 20, Township 9 South, Range 16 East API 43-013-33068 Federal 9-21-9-16 well located in NE/4 SE/4, Section 21, Township 9 South, Range 16 East API 43-013-33145 Monument Federal 31-21-9-16Y well located in NW/4 NE/4, Section 21, Township 9 South, Range 16 East API 43-013-31726 Federal 1-22-9-16 well located in NE/4 NE/4, Section 22, Township 9 South, Range 16 East API 43-013-32612 Federal 7-22-9-16 well located in SW/4 NE/4, Section 22, Township 9 South, Range 16 East API 43-013-33027 Federal 3-23-9-16 well located in NE/4 NW/4, Section 23, Township 9 South, Range 16 East API 43-013-33176 Federal 11-23-9-16 well located in NE/4 SW/4, Section 23, Township 9 South, Range 16 East API 43-013-33178 Federal 15-23-9-16 well located in SW/4 SE/4, Section 23, Township 9 South, Range 16 East API 43-013-33182 Federal 3-24-9-16 well located in NE/4 NW/4, Section 24, Township 9 South, Range 16 East API 43-013-33084 Federal 15-24-9-16 well located in SW/4 SE/4, Section 24, Township 9 South, Range 16 East API 43-013-33344 Federal 21-25Y well located in NE/4 NW/4, Section 25, Township 9 South, Range 16 East API 43-013-31394 The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures. Selected zones in the Green River Formation will be used for water injection. The maximum requested injection pressures and rates will be determined based on fracture gradient information submitted by Newfield Production Company. Any person desiring to object to the application or otherwise intervene in the proceeding must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for the proceeding is Brad Hill, Permitting Manager, at P.O. Box 145801, Salt Lake City, UT 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedural rule. Protestants and/or intervenors should be prepared to demonstrate at the hearing how the matter affects their interests. Dated this 22nd day of May, 2012. STATE OF UTAH DIVISION OF OIL, GAS & MINING /s/Brad Hill Permitting Manager 794885	
SCHEDULE		AD	
Start 05/25/2012 End 05/25/2012		TC	
CUST. REF. NO.			
Newfield Prod UIC-392			
CAPTION			
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT			
SIZE			
87 Lines 3.00			
TIMES			
3			
MISC. CHARGES			

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba MEDIAONE OF UTAH LEGAL BOOKER, I C  
BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RES  
CAUSE NO. UIC-392 IN THE MATTER OF THE APPLICA FOR DIV OF OIL-GAS & MIN  
COMPANY, LLC dba MEDIAONE OF UTAH, AGENT FOR THE SALT LAKE TRIBUNE AND D  
ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH, AND PUBLISHED IN SAL  
NOTICE IS ALSO POSTED ON UTAHLEGALS.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON  
UTAHLEGALS.COM INDEFINITELY.

PUBLISHED ON Start 05/25/2012 End 05/25/2012

SIGNATURE

5/25/2012

VIRGINIA CRAFT  
Notary Public, State of Utah  
Commission # 581469  
My Commission Expires  
January 12, 2014

THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"  
PLEASE PAY FROM BILLING STATEMENT

Send Payments to:  
 Uintah Basin Standard  
 268 S 200 E  
 Roosevelt, Utah 84066

Phone: 435-722-5131  
 Fax: 435-722-4140



Invoice Number      Invoice Date

30968

5/30/2012

Advertiser No.

Invoice Amount

Due Date

2080

\$191.45

6/29/2012

DIVISION OF OIL GAS & MINING  
 Rose Norton  
 1594 W. N. TEMPLE STE 121  
 PO BOX 145801  
 SALT LAKE CITY, UT 84114-5801

RECEIVED  
 MAY 05 2012  
 DIV OF OIL GAS & MINING

1 1/2% fee will be charged to all  
 past due balances.

**Amount Enclosed**

Please detach top portion and return with your payment

**INVOICE**

Uintah Basin Standard

DIVISION OF OIL GAS & MINING

Invoice No. 30968

5/30/2012

Date	Order	Description	Ad Size	SubTotal	Sales Tax	Amount
5/30/2012	15615	UBS				
		UBS Legal Notice: Not of Agcy Actn: Newfield Cause No. UIC-392 Pub. May 29, 2012				\$191.45

Sub Total: \$191.45

Total Transactions: 1      Total: \$191.45

**SUMMARY**      Advertiser No. 2080      Invoice No. 30968

1 1/2% fee will be charged to all past due balances.

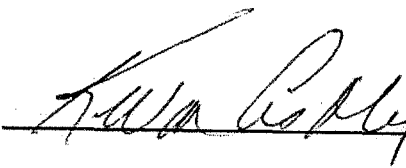
Thank You for your business!

Thank you for advertising with us, we appreciate your business!

# AFFIDAVIT OF PUBLICATION

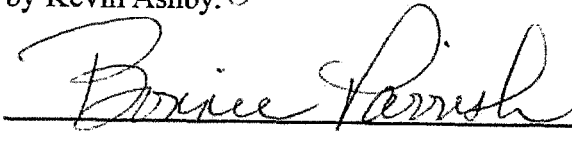
County of Duchesne,  
STATE OF UTAH

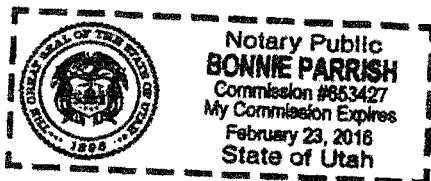
I, Kevin Ashby on oath, say that I am the PUBLISHER of the Uintah Basin Standard, a weekly newspaper of general circulation, published at Roosevelt, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue such newspaper for 1 consecutive issues, and that the first publication was on the 29 day of May, 2012, and that the last publication of such notice was in the issue of such newspaper dated the 29 day of May, 2012, and that said notice was published on Utahlegals.com on the same day as the first newspaper publication and the notice remained on Utahlegals.com until the end of the scheduled run.

  
Publisher

Subscribed and sworn to before me on this

1 day of June, 2012  
by Kevin Ashby.

  
Notary Public



## NOTICE OF AGENCY ACTION CAUSE NO. UIC-392

BEFORE THE DI-  
VISION OF OIL, GAS  
AND MINING, DE-  
PARTMENT OF NAT-  
URAL RESOURCES,  
STATE OF UTAH.

IN THE MATTER  
OF THE APPLICA-  
TION OF NEW-  
FIELD PRODUC-  
TION COMPANY  
FOR ADMINISTRA-  
TIVE APPROVAL  
OF CERTAIN WELLS  
LOCATED IN SEC-  
TIONS 12, 13, 15, 17,

and 29, 2012.  
Published May 22  
ing.  
in advance of the hear-  
Planning at least 3 days  
call Duchesne County  
this meeting should  
commodations for  
needing special ac-  
utah.gov. Persons  
mhyde@duchesne.  
Utah 84021 or email  
Box 317, Duchesne,  
County Planning, P.O.  
ments to: Duchesne  
1151. Or, send com-  
Hyde at (435) 738-  
mation contact Mike  
For further infor-  
esne, Utah.  
Center Street, Duch-  
Building, 734 North  
County Administration  
Chambers, Duchesne  
ing, beginning at 1:30  
June 18, 2012 meet-  
#12-302 during their  
proposed Ordinance  
recommendation and  
Planning Commission  
lic hearing to review the  
ers will conduct a pub-  
County Commission-  
The Duchesne  
residential areas.  
restrict the numbers  
of livestock kept in

## LEGAL N Your Right

Christensen, located on the south side of Highway 87 (Ioka Lane) and the west side of 4000 West, in the NE ¼ of the NE ¼ of Section 2, Township 3 South, Range 2 West.

The Duchesne County Commission-ers will conduct a public hearing to review the Planning Commission recommendation and proposed rezoning ordinance during their June 18, 2012 meeting, beginning at 1:30 PM in the Commission Chambers, Duchesne County Administration Building, 734 North Center Street, Duchesne, Utah.

For further information contact Mike

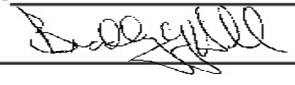
## SERET P TRIC COOP

## ATORY TECHN CHEMIST

s an electrical utility states. We have a Laboratory Tech a 500 MW coal-firial, Utah.

candidate will be re le, and take indepen on high pressure O<sub>2</sub> scrubbers, demin potable water, and r candidate must also vondensate polishers, bulk chemical handi mputer literate and software.

High School graduat experience as a jo nician in an industria

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-52018
<b>1. TYPE OF WELL</b> Water Injection Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630, Myton, UT, 84052		<b>8. WELL NAME and NUMBER:</b> FEDERAL 1-20-9-16
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0617 FNL 0652 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 20 Township: 09.0S Range: 16.0E Meridian: S		<b>9. API NUMBER:</b> 43013330660000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/12/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: <input type="text" value="New Perforations"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  The above subject well had new perforations added during a conversion. Attached are the schematic and Daily Activity report. The following perforation was added in the Green River Formation: D1 4636-4639' 3 JSPF 9 holes		
<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> May 20, 2013 <b>By:</b> 		
<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/6/2013	

## FEDERAL 1-20-9-16

Spud Date: 05/16/07

Put on Production: 07/25/07

GL: 6038' KB: 6050'

SURFACE CASING

CSG SIZE: 8-5/8"

GRADE: J-55

WEIGHT: 24#

LENGTH: 7 jts. (312.36')

DEPTH LANDED: 324.21' KB

HOLE SIZE: 12-1/4"

CEMENT DATA: 160 sxs Class "G" cmt, est 7 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"

GRADE: J-55

WEIGHT: 15.5#

LENGTH: 137 jts. (6015.83')

DEPTH LANDED: 6029.08' KB

HOLE SIZE: 7-7/8"

CEMENT DATA: 325 sxs Prem. Lite II mixed &amp; 425 sxs 50/50 POZ.

CEMENT TOP: 60'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#

NO. OF JOINTS: 133 jts (4089.7')

SEATING NIPPLE: 2-7/8" (1.10')

SN LANDED AT: 41013.7' KB

ON/OFF TOOL AT: 4102.8'

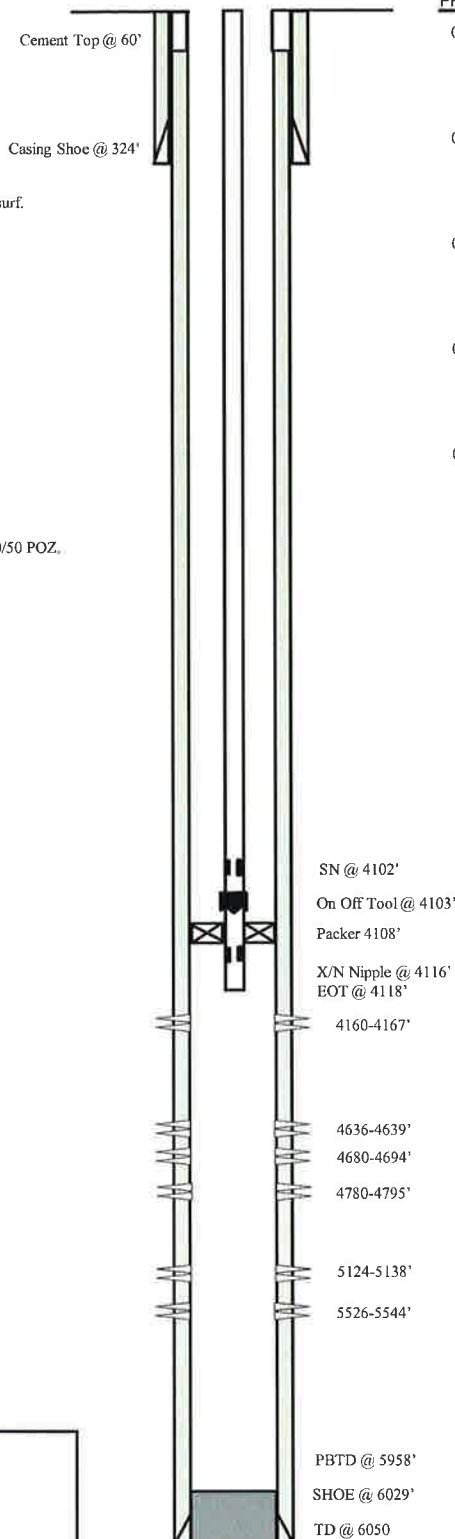
ARROW #1 PACKER CE AT: 4107.75'

XO 2-3/8 x 2-7/8 J-55 AT: 4111.6'

TBG PUP 2-3/8 J-55 AT: 4112.1'

X/N NIPPLE AT: 4116.5'

TOTAL STRING LENGTH: EOT @ 4118'

Injection Wellbore  
DiagramFRAC JOB

07/19/07 5526-5544'

**Frac CPl sands as follows:**

40327# 20/40 sand in 416 bbls Lightning 17 frac fluid. Treated @ avg press of 2186 psi w/avg rate of 24.7 BPM. ISIP 2165 psi. Calc flush: 5524 gal, Actual flush: 5002 gal.

07/19/07 5124-5138'

**Frac LODC sands as follows:**

60273# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 2674 psi w/avg rate of 24.8 BPM. ISIP 2760 psi. Calc flush: 5122 gal, Actual flush: 4582 gal.

07/19/07 4780-4795'

**Frac C sands as follows:**

60060# 20/40 sand in 510 bbls Lightning 17 frac fluid. Treated @ avg press of 1833 psi w/avg rate of 24.8 BPM. ISIP 1800 psi. Calc flush: 4778 gal, Actual flush: 4288 gal.

07/19/07 4680-4694'

**Frac D2 sands as follows:**

79938# 20/40 sand in 623 bbls Lightning 17 frac fluid. Treated @ avg press of 1860 psi w/avg rate of 24.8 BPM. ISIP 1960 psi. Calc flush: 4678 gal, Actual flush: 4120 gal.

07/20/07 4160-4167'

**Frac GB6 sands as follows:**

25213# 20/40 sand in 335 bbls Lightning 17 frac fluid. Treated @ avg press of 2145 psi w/avg rate of 24.3 BPM. ISIP 2025 psi. Calc flush: 5503 gal, Actual flush: 4914 gal.

1/26/09

**Pump Change.** Updated r & t details.

10/08/12 4636-4639'

**Frac D1 sands as follows:**

12260# 20/40 sand in 178 bbls Lightning 17 frac fluid.

10/09/12

**Convert to Injection Well**

10/12/12

**Conversion MIT Finalized** – update tbg detailPERFORATION RECORD

07/10/07	5526-5544'	4 JSPF	72 holes
07/19/07	5124-5138'	4 JSPF	56 holes
07/19/07	4780-4795'	4 JSPF	60 holes
07/19/07	4680-4694'	4 JSPF	56 holes
07/19/07	4160-4167'	4 JSPF	28 holes
10/05/12	4636-4639'	3 JSPF	9 holes

**NEWFIELD****FEDERAL 1-20-9-16**

617'FNL &amp; 652' FEL

NE/NE Section 20-T9S-R16E

Duchesne Co, Utah

API #43-013-33066; Lease # UTU-52018

LCN 10/18/12

## Daily Activity Report

Format For Sundry  
**FEDERAL 1-20-9-16**  
**8/1/2012 To 12/30/2012**

**10/4/2012 Day: 1**

**Conversion**

Nabors #1608 on 10/4/2012 - MIRUSU. LD rods. Pressure test tbg. - RU pumping unit. Unseat rod pump. Flush tbg w/ 40 BW @ 250°. - Soft seat rods & fill tbg w/ 12 BW. Pressure tbg to 3000 psi. Pressure was dropping off slow. Pressure tbg to 5000 psi attempting to open hole bigger w/o success. - LD 215- 3/4" rods, ponies & polished rod on trailer. Flush tbg & rods w/ additional 20 BW during TOH. - X-over for tbg equipment. Tie drill line back single line. ND wellhead. TA was not set. NU BOPs. RU rig floor. - Flush tbg w/ 30 BW. Drop standing valve down tbg. Fill tbg & pressure test tbg to 3000 psi (good test). - RU sandline. RIH w/ fishing tool on sandline & retrieve. - MIRUSU. Hot oiler had pumped 60 bbls water down csg @ 250°.

**Daily Cost: \$0**

**Cumulative Cost: \$8,328**

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**10/5/2012 Day: 2**

**Conversion**

Nabors #1608 on 10/5/2012 - TOH w/ tbg (talleying, breaking collars & applying Liquid-Oring to threads). LD 48- jts tbg on trailer. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'. - On standby waiting for possible frac schedule change. - On standby waiting for possible frac schedule change. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - TOH w/ 134- jts 2 7/8" 6.5# 8rd EUE tbg (talley, breaking collars & applying Liquid O-ring to threads). TA kept hanging up on TOH. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - LD 48- jts on tbg on trailer. Bottom 3- jts had a lot of scale. - SWIFN. RU pump & pump lines. - SWIFN. RU pump & pump lines. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perferators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - Held safety meeting & discussed JSA's. Open well w/ 0 psi on casing. RU perferators WLT & lubricator. RIH w/ gauge ring to 4720'. Perferate D1 sds @ 4636-39' w/ 3 spf for total of 9 shots. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - RU 5-1/2" "TS" RBP, on/off tool, 2-3/8" x 4' pup joint, "HD" pkr. PU Tally, drift & TIH w/ work string tbg. Set RBP @ 4670'. Set pkr @ 4645'. - Tools won't test. Move pkr. Still won't test. - Tools won't test. Move pkr. Still won't test. - Release RBP & reset @ 4090'. Set pkr @ 4076' (above all perfs). Test to 4000 psi. Move tools to find GB6 sds. Locate perfs. Set RBP @ 4200'. Move pkr up hole to locate perfs. GB6 sds take fluid @ 3/4 bpm @ 1350 psi. There is a 18' correction some where (can't find in tally). Release PKR and leave Hang @ 3971'.

**Daily Cost: \$0**

**Cumulative Cost: \$16,122**

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**10/8/2012 Day: 4**

**Conversion**

Nabors #1608 on 10/8/2012 - Frac D-1 Sands, FB, CO top of RBP and retrieve RBP. POOH. RBIH w/injection string. - Waith for acid truck from Multi-chem. - SWIFN. - Spot in pipe trailer and start LD pipe. LD 95 jts of 2 7/8" N-80 tbg. - Had to wair on semi trailer to LD pipe. Well still flowing after releasing the plug. - Release pkr, RD frac valve, RIH to latch on to RBP. Had to CO 15' of fill. Circ clean and released plug. - Open tbg up to FB on a 20 choke. Died down

to 0 after 20 bbls. - Filled backside w/12 bbls and PU to 500 psi. Frac D-1 sands 4636-39'. RD frac crew, called runners for the tbg trailer. - Spot in frac crew and RU lines. Set pkr @ 4614'. - Safety Meeting, discussed location hazards, recent NFX incidents, job procedure, emergency plans, meeting point. - Move plug down to 4670' and plug up to 4662'. Pressure test plug to 4000 PSI. Good test. - RU Muti-chem and pump 2 Bbls acid. Pump 24 Bbls behind HCL to spot @ 4640'. Move PKR above perms to 4608' and start breaking dwn zones. BD @ 3700 psi. Increased rate to .5 Bbl and pumped 5 bbls @ 1500 psi. shut down and pressurebled down to zero in less then a minute. - Waiting on frac crew.

**Daily Cost:** \$0

**Cumulative Cost:** \$84,384

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**10/9/2012 Day: 5**

**Conversion**

Nabors #1608 on 10/9/2012 - TIH w/ pkr. Test tbg. Set pkr. Test casing. RDMOSU. Well ready for MIT. - Held safety meeting & discussed JSA's. TIH w/ XN nipple, 2-3/8" x 4' pup jt, XO sub (2-7/8" to 2-3/8"), "HD" pkr, On/Off tool, PSN, 133 jts 2-7/8" tbg. - Tighten well head bolts. Test casing to 1400 psi. Took 2 attempts. - Pump 20 bbls fluid. Drop STD vlve. Fill tbg w/ 12 bbls. Test tbg to 3000 psi for 30 min, took 3 attempts. - RDMOSU. Well ready for MIT. - Pump 50 bbls pkr fluid. Set pkr w/ 15,000#'s tension @ 4107' CEO. 4117' EOT. - Single line rig. RD BOP's. Hang tbg in well on 6' pup joint. - RU sand line & fish std valve.

**Daily Cost:** \$0

**Cumulative Cost:** \$113,603

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**10/16/2012 Day: 6**

**Conversion**

Rigless on 10/16/2012 - Conduct initial MIT - On 10/10/2012 Chris Jensen with the State of Utah DOGM was contacted concerning the initial MIT on the above listed well. On 10/12/2012 the casing was pressured up to 1575 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 150 psig during the test. There was not a State representative available to witness the test. **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$190,137

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**Pertinent Files: Go to File List**